## TRANSCRIPT OF RECORD

## Supreme Court of the United States

OCTOBER TERM, 1961

No. 304

CONTINENTAL ORE COMPANY, ET AL., PETITIONERS,

vs.

UNION CARBIDE AND CARBON CORPORATION, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

PETITION FOR CERTIORARI FILED AUGUST 11, 1961 CERTIORARI GRANTED OCTOBER 23, 1961

# United States Court of Appeals

for the Rinth Circuit

CONTINENTAL ORE COMPANY, a Partnership, and HENRY J. LEIR, ERNA D. LEIR, LINA SCHLOSS, as Individuals and as partners under the trade name and style of CON-TINENTAL ORE COMPANY,

Appellants,

VS.

UNION CARBIDE AND CARBON CORPORA-TION; UNITED STATES VANADIUM CORPORATION; ELECTRO METALLUR-GICAL COMPANY; ELECTRA METAL-LURGICAL SALES CORPORATION; EL-ECTRO METALLURGICAL COMPANY OF CANADA, LIMITED; VANADIUM CORPORATION OF AMERICA,

Appellees.

## Transcript of Record

In Seven Volumes
VOLUME 1.
(Pages 1 to 416, inclusive)

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[Clerk's Note: When deemed likely to be of an important nature, errors or doubtful matters appearing in the original certified record are printed literally in italic; and, likewise, cancelled matter appearing in the original certified record is printed and cancelled herein accordingly. When possible, an omission from the text is indicated by printing in italic the two words between which the omission seems to occur.]
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#### No. 29008H

CONTINENTAL ORE COMPANY, a partnership; and HENRY J. LEIR, ERNA D. LEIR, LINA SCHLOSS, as individuals and as partners under the trade name and style, CONTI-NENTAL ORE COMPANY, Plaintiffs,

VS.

UNION CARBIDE AND CARBON CORPORATION, UNITED STATES VANADIUM
CORPORATION, ELECTRO METALLURGICAL COMPANY, ELECTRO METALLURGICAL SALES CORPORATION,
ELECTRO METALLURGICAL COMPANY
OF CANADA, LIMITED, VANADIUM
CORPORATION OF AMERICA, DOE ONE,
DOE TWO, DOE THREE, DOE FOUR,
DOE FIVE, DOE SIX, and DOE SEVEN,
Defendants.

#### COMPLAINT

The above-named plaintiffs bring this action against the above-named defendants, and for claim of relief, they complain and allege as follows:

#### I.

#### Jurisdiction and Venue

1. This complaint is filed and these proceedings are instituted against the above-named defendants

under Section 15 of Title 15 U.S.C.A., being a part of the Act of Congress of July 2, 1890, c.649, 26 Stat. 209, as amended, entitled "An Act to Protect Trade and Commerce Against Unlawful Restraints and Monopolies," commonly known as the Sherman Act and the Clayton Act.

2. Each of the corporate defendants transacts business, maintains offices and may be found in San Francisco, California.

#### 11.

#### Description of the Parties

- 3. The Continental Ore Company is a partnership composed of Henry J. Leir, Erna D. Leir and Lina Schloss, all of New York City, New York. It is successor in interest to the Continental Ore Corporation which was incorporated under the laws of the State of New York on June 16, 1939. On May 5, 1942, Henry J. Leir, Erna D. Leir and Lina Schloss, the sole stockholders in Continental Ore Corporation, formed a partnership under the name of Continental Ore Company. On October 10, 1942, the said partnership acquired all of the assets and assumed all of the liabilities of the Continental Ore Corporation, which was dissolved on the same date. Continental Ore Corporation and its successor partnership, Continental Ore Company, hereinafter referred to as "Continental," have been engaged in the business of manufacturing and distributing ferro-alloys and of distributing non-ferrous minerals, ores and metals.
  - 4. Union Carbide and Carbon Corporation (here-

inafter referred to as "Union Carbide") is hereby made a defendant herein. Union Carbide is a corporation organized and existing under the laws of the State of New York, with its principal place of business at 30 East-42nd Street, New York, New York.

- 5. United States Vanadium Corporation (hereinafter referred to as "U.S.V.") is hereby made a defendant herein. U.S.V. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 30 East 42nd Street, New York, New York. All of the stock of U.S.V. is, and at all times hereinafter mentioned has been, owned by the defendant Union Carbide.
- 6. Electro Metallurgical Company (hereinafter referred to as "Electromet") is hereby made a defendant herein. Electromet is a corporation organized and existing under the laws of the State of West Virginia, with its principal place of business at 30 East 42nd Street, New York, New York, All of the stock of Electromet is, and at all times hereinafter mentioned has been, owned by the defendant Union Carbide.
- 7. Electro Metallurgical Sales Corporation (hereinafter referred to as "Electromet Sales") is hereby made a defendant herein. Up to March 14, 1949, Electromet Sales was a corporation organized and existing under the laws of the State of New York, with its principal place of business at 30 East 42nd Street, New York, New York, All of the stock of Electromet Sales was owned by the defendant Union Carbide. On March 14, 1949, Electromet Sales merged into Union Carbide.

- 8. Electro Metallurgical Company of Canada, Limited (hereinafter referred to as "Electromet of Canada") is hereby made a defendant herein. Electromet of Canada is a corporation organized and existing under the laws of the Dominion of Canada, and maintains offices at 30 East 42nd Street, New York, New York. All of the stock of Electromet of Canada is, and at all times hereinafter mentioned has been, owned by the defendant Union Carbide.
- 9. Vanadium Corporation of America (hereinafter referred to as "V.C.A.") is hereby made a defendant herein. V.C.A. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 420 Lexington Avenue, New York, New York.
- 10. The true names or capacities, whether corporate, associate or otherwise, of defendants, Doe One, Doe Two, Doe Three, Doe Four, Doe Five, Doe Six and Doe Seven, are unknown to plaintiff, and plaintiff therefore designates them by such fictitious names, and when their true names are discovered, this complaint will be amended accordingly.
- 11. Whenever it is hereinafter alleged in this complaint that any defendant corporation did any act or thing, such allegation shall be deemed to mean that the officers, agents, and employees of the said defendant authorized, ordered or did such act or thing for and on behalf of said defendant corporation while actively engaged in the management, direction, control and operation of the business affairs of said corporation.

#### III.

#### Nature of the Trade and Commerce

#### A. The Commodity and Its Uses

- 12. Vanadium is a metallic element which is principally used as an alloy in steel. The addition of vanadium to steel increases the tensile and torsional strength of the steel and imparts toughness thereto. Vanadium steels are used in the manufacture of high-speed tools, armor plate, locomotive axles, drills, piston rods, transmission shafts, gun barrels, automobile parts, steel castings, springs, bolts, nuts, tubing, airplane propellers, crankshafts, and various other steel products. Minor quantities of vanadium are used in the chemical industry as a catalyst, in the ceramics industry, and for other industrial purposes.
- 13. The largest consumers of vanadium in the United States are steel manufacturers, and most of the vanadium used in steel is in the form of ferrovanadium, which is a mixture of iron and vanadium in which the vanadium content ranges from 35 per cent to 80 per cent.
- 14. The principal source of vanadium is vanadium-bearing ore, although minor quantities of vanadium have been produced from soot and flue dust collected from marine boilers burning Venezuelan and Mexican oils. During the period from 1933 to June 1, 1946, a major part of all vanadium produced in the United States was produced from vanadium ore bodies lying in the western part of the State of Colorado, the eastern part of the State

of Utah, and the northern parts of the States of New Mexico and Arizona. A substantial part of all vanadium consumed in the United States was produced in this country during said period from vanadium-bearing ores and concentrates imported into this country from Peru. Some vanadium was produced as a by-product of mining operations conducted primarily for other minerals.

15. The vanadium contained in vanadium-bearing ores and other vanadium-bearing materials is extracted therefrom in the form of vanadium oxide, which is a material containing a chemical mixture of vanadium and oxygen, combined with a minor amount of sodium and other impurities. Vanadium oxide is converted to ferro-vanadium in electric furnaces or through an alumino-thermic process. Most vanadium oxide produced in this country is converted to ferro-vanadium.

16. Vanadium-bearing ore mined in the States of Colorado, Utah, Arizona and New Mexico has been sold and shipped in interstate commerce to the defendants in Colorado and other states of the United States. Vanadium oxide produced in the States of Colorado and Pennsylvania has been sold and shipped by the defendants in interstate commerce to the States of New York, Pennsylvania, Ohio, West Virginia and Illinois and other States of the United States, and in foreign commerce to purchasers in foreign nations. Ferro-vanadium produced in New York, Pennsylvania, Ohio, West Virginia, and Illinois has been sold and shipped by the defendants in interstate commerce to steel produc-

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ers and other purchasers in numerous states of the United States other than the state in which the same was produced and in foreign commerce to foreign nations.

#### B. Background of the Industry

#### I. V.C.A.

17. In or about 1911, V.C.A. entered the vanadium business by the purchase of vanadium-bearing ore bodies in the Republic of Peru and a ferrovanadium plant at Bridgeville, Pennsylvania. In addition to its Peruvian deposits, V.C.A. acquired, prior to the year 1931, extensive vanadium ore deposits and a vanadium oxide mill site in the State of Colorado. V.C.A. has produced vanadium oxide and ferro-vanadium in its plant in Pennsylvania from ores mined in Peru, Colorado, Utah, New Mexico and Arizona and from flue dust, vanadium oxide and other vanadium-bearing materials purchased by V.C.A.

18. Prior to the year 1931, V.C.A. depended almost entirely for a source of vanadium on ores produced from its properties in Peru, which were shipped from Peru to V.C.A.'s ferro-vanadium plant at Bridgeville, Pennsylvania. During the years 1931, 1932 and 1933, V.C.A. made no substantial imports of vanadium-bearing ores from Peru and did not resume importation on any large scale until the year 1937. This cessation of imports was due in part to the imposition by Peru in 1931 of an export tax on vanadium ore and in part to the fact

that during the same year the grade of ore mined in the Peruvian mines of V.C.A. changed to an extent that required the development of new concentration processes. In the year 1939, V.C.A. commenced the mining of vanadium ore in the United States and the production of vanadium oxide therefrom by constructing and operating a vanadium oxide mill in Colorado.

#### II. Union Carbide and Subsidiaries

- 19. In 1926, Union Carbide acquired vanadium bearing ore deposits and a vanadium oxide mill near Rifle, Colorado, and a ferro-vanadium plant in Ohio. U.S.V. was organized as a wholly-owned subsidiary of Union Carbide to acquire, develop, and mine vanadium-bearing ore deposits, to purchase ore, and to produce vanadium oxide. In 1927, U.S.V. commenced the production of vanadium oxide at the Rifle mill. In 1936, U.S.V. constructed an additional vanadium oxide mill in Colorado and in 1937 began producing vanadium oxide in that mill.
- 20. Vanadium oxide produced by U.S.V. in Colorado was shipped for conversion into ferro-vanadium to plants in Ohio, New York, and West Virginia which were operated by Electromet and U.S.V. Ferro-vanadium produced by Electromet and U.S.V. has been transferred to Electromet Sales for sale to purchasers in many states of the United States and foreign countries. Some of the vanadium oxide produced by U.S.V. has been trans-

ferred to Electromet Sales for sale to purchasers in the United States and foreign countries. Union Carbide coordinates the activities of its aforesaid subsidiaries, and participates in the formulation of the policies of said subsidiaries. A major part of all vanadium sold by Electromet Sales has come from vanadium oxide produced in Colorado by U.S.V., although Electromet has produced some vanadium oxide from vanadium-bearing materials purchased from other sources, and both U.S.V. and Electromet have purchased vanadium oxide produced by others.

# III. Independent Producers

- 21. Until about the year 1936, very little, if any, vanadium-bearing ore was mined in the States of Colorado, Utah, Arizona, and New Mexico primarily for its vanadium content, with the exception of that mined by U.S.V. in connection with its vanadium oxide mill at Rifle, Colorado. In the year 1936, independent mine owners and producers in said states commenced the mining of vanadium-bearing ores primarily for their vanadium content. Between 1937 and 1939, U.S.V. and V.C.A. started to purchase vanadium-bearing ores mined by independent producers in the Colorado-Utah area.
- 22. During the period from 1936 to 1943, inclusive, various small independent vanadium oxide mills produced vanadium oxide in the Colorado-Utah area. Most of the vanadium oxide produced in these oxide mills up to the summer of 1940 was sold in the foreign market. Thereafter, most of the

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vanadium oxide produced by independent producers was sold to U.S.V. and V.C.A.

23. During the period from 1929 to the date of the filing of this complaint, Electromet and V.C.A. were the only producers of ferro-vanadium in the United States with the exception of the years 1936, 1937 and 1940 to 1944, when small amounts of ferro-vanadium were produced by other companies including Continental.

## C. Control of the Industry

- 24. During the period from 1933 to the date of the filing of this complaint, Electromet, U.S.V. and V.C.A. produced over 99 per cent of all ferrovanadium produced in the United States, and during said period, V.C.A. and Electromet Sales sold in excess of 99 per cent of all ferro-vanadium sold and consumed in the United States.
- 25. During the period from 1933 to the date of the filing of this complaint, V.C.A. and U.S.V. produced over 90 per cent of all vanadium oxide produced in the United States, and during said period Electromet Sales and V.C.A. sold approximately 99 per cent of all the vanadium oxide sold and consumed in the United States.
- 26. During the period from 1933 to the date of the filing of this complaint, V.C.A. sold approximately two-thirds of all ferro-vanadium and vanadium oxide sold by defendants, and Electromet Sales sold approximately one-third of all said ferro-vanadium and vanadium oxide.

#### IV.

## The Combination and Conspiracy

- 27. Beginning in or about 1933 and continuing thereafter up to the date of the filing of this complaint, the defendants and others acting in concert with them have violated and are now violating Sections 1 and 2 of the Sherman Act by unlawfully contracting, combining and conspiring to monopolize, monopolizing and attempting to monopolize and by unlawfully contracting, combining and conspiring to restrain trade, and commerce among the several states and with foreign nations in ferrovanadium and vanadium oxide.
- 28. The said unlawful conspiracy to monopolize, monopoly and attempts to monopolize, contracts, combinations and conspiracies to restrain trade and commerce in the production, sale and distribution of ferro-vanadium and vanadium oxide have consisted and do consist of a continuing agreement and concert of action among the defendants, the substantial term of which agreement and the means of such concert of action being as follows:
- (a) That the defendants control and dominate the production of vanadium ore and the production and sale of ferro-vanadium and vanadium oxide by:
- (1) Purchasing or acquiring control over substantially all commercially available vanadium-bearing ore deposits in the United States and substantially all vanadium oxide produced by others in the United States:
  - (2) Refusing to sell vanadium oxide to other pro-

ducers or potential producers of ferro-vanadium in the United States or to purchasers for resale in the United States;

- (3) Entering into annual requirement contracts with the principal purchasers of ferro-vanadium in the United States so as to preclude others from securing the business of such purchasers;
- (4) Depriving other producers of vanadium oxide of a competitive market for their vanadium oxide.
- (b) That defendants eliminate and suppress competition between themselves and with others in the production and sale of vanadium oxide and ferrovanadium, by:
- Apportioning and dividing sales of ferrovanadium and vanadium oxide in the ratio of approximately two-thirds to V.C.Λ. and one-third to Electromet Sales;
- (2) Assisting each other to maintain their control and domination over the sale of ferro-vanadium and vanadium oxide and their respective percentages of the sales thereof by supplying or helping to provide each other with necessary supplies of vanadium-bearing ore and vanadium oxide to enable them to carry out the allocation and division of sales aforesaid:
- (3) Fixing identical prices for the sale of ferrovanadium and vanadium oxide and for the purchase of vanadium-bearing ore;
- (4) Refraining from competing with each other in making purchases of or otherwise acquiring control over vanadium oxide produced by others.

- (c) That the defendants agree among themselves to fix prices for the sale of ferro-vanadium and vanadium oxide, and for the purchase of vanadiumbearing ore.
- 29. To effectuate the aforesaid combination and conspiracy, and as a part thereof, the defendants throughout the period from 1933 to the date of the filing of this complaint, regularly and continuously did the things which they agreed to do, as aforesaid, and more specifically, among others, did the following things:
- (a) Agreed that Electromet Sales and U.S.V. would supply V.C.A. with large quantities of vanadium oxide to enable V.C.A. to maintain its position as the largest seller of ferro-vanadium and vanadium oxide in the United States, and that prices for ferro-vanadium and vanadium oxide would be raised. Pursuant to said agreement, the following things, among others, were done:
- (1) Electromet Sales, between 1933 and 1939, inclusive, supplied V.C.A. with several million pounds of vanadium oxide at prices substantially below those charged to other purchasers during said period;
- (2) Between 1939 and 1942, U.S.V. produced vanadium oxide from ore mined by U.S.V. from V.C.A. ore bodies, and during 1939 and 1940 delivered vanadium oxide to V.C.A. at a cost to V.C.A. below the prices charged for vanadium oxide to other purchasers;

- (3) V.C.A. utilized the vanadium oxide obtained from Electromet Sales and U.S.V. to meet orders from its customers and continued to sell approximately two-thirds of all ferro-vanadium and vanadium oxide sold by the defendants to consumers in the United States and foreign countries;
- (4) Prices for ferro-vanadium and vanadium oxide to purchasers other than the defendants themselves were increased by the beginning of 1934 and were maintained at the increased levels from that time to the date of the filing of this complaint.
- (b) Throughout the period from 1939 to the date of the filing of this complaint, U.S.V. and V.C.A. agreed upon the prices to be paid by them to independent miners for vanadium ore, and purchased vanadium ore at said prices.

# V.

# Elimination of Continental From Vanadium Industry

- 30. One of the direct effects proximately caused by the monopolistic practices herein alleged, as intended by defendants, was the elimination from the industry of independent producers and distributors of ferro-vanadium and vanadium oxide. One of the companies so eliminated from the industry was Continental. The acts and practices leading to the restraint upon the trade of Continental were as follows:
- 31. The plaintiff Henry J. Leir has been engaged in the alloy metal business for a great many years.

In 1933 Henry J. Leir and his wife organized a Luxemburg firm in the alloy metal field which operated under the trade-name and style of "Societé Anonyme Des Minerais," hereinafter called "Minerais," The principal business operations of this firm took place in France and Belgium up to 1939.

32. In January, 1938, plaintiff Henry J. Leir visited the United States ad, shortly thereafter, entered into a contract with the Apex Smelting Company of Chicago, hereinafter called "Apex." The contract is dated July 1, 1938 between Minerais and Apex. Under the terms of the said contract. Minerais granted to Apex rights to a secret, highvanadium content ferro-vanadium process. Net profits were to be divided equally between the contract parties, the contract to run for fourteen years with a provision that Apex should have the right to cancel in the event that in any two successive years it failed to make a net profit from the business of Seven Thousand Five Hundred Dollars (\$7,500) a year. At the same time, Apex and Minerais entered into a contract whereby Henry J. Leir agreed to handle the ferro-vanadium sales for Apex on a commission basis and Henry J. Leir further agreed to secure vanadic acid supplies for Apex. In the meantime, as hereinbefore stated, the Leirs had organized the Continental Ore Corporation which became, in place of Henry J. Leir, the exclusive sales agent for Apex throughout the United States except for the states of Indiana, Illinois, Wisconsin and California.

- 33. By virtue of the monopolization of vanadium-bearing ores and vanadic acid, as hereinbefore alleged, and the refusal of Union Carbide and V.C.A. to sell Apex, Apex was unable to operate profitably for the specific reason that it was unable to obtain vanadic acid, and was thus compelled to cease manufacture of ferro-vanadium. Until Apex and Continental were stopped, Apex produced and Continental distributed substantial quantities of ferro-vanadium. Operations under the contract with Apex extended from the spring of 1940 to the spring of 1942.
- 34. Continental started to ship vanadium compounds from premises they had rented on Long Island, New York, in August of 1942. It made substantial shipments of ferro-vanadium both in the United States and to Canada from the Long Island location, where it had installed grinding and mixing machinery. Its business in Canada was effectively eliminated by defendants as hereinafter more fully stated. The monopolistic practices of defendants made difficult the purchase of the raw materials by Continental from which to process vanadium compounds, and finally in 1944, Continental discontinued shipping from its Long Island location because the difficulty of securing raw materials rendered it commercially impossible to operate profitably. In their efforts to deprive Continental of access to vanadium-bearing ores and vanadium oxide, the defendants acquired ownership or control of deposits and mills of Continental's suppliers and agreed to and did carry on preemptive buying pro-

grams featuring premium payments to established and potential suppliers of Continental.

- 35. In the spring of 1944, Continental entered into a contract with Imperial Paper and Color Corporation of Glen Falls, New York, hereinafter called "Imperial," whereby Imperial agreed to process ferro-vanadium and vanadium oxide and Continental agreed to act as sales agent for its entire output, in addition to undertaking to secure the necessary raw materials. At the end of the year 1944. Imperial was compelled to abandon the contract with the consent of Continental because of the inability of Imperial or Continental to secure vanadium oxide or vanadium-bearing ores. Throughout this period of time, Continental had secured orders for all of the ferro-vanadium to be produced by Imperial and/or Apex, but it was unable to fill the said orders because of the inability to secure ferrovanadium for lack of the raw materials.
- 36. As a further part of the conspiracy to restrain and monopolize, as hereinbefore alleged, defendants agreed to allocate the Canadian market among themselves and to preclude Continental from serving established Canadian customers and from spreading its sales to other Canadian firms. Throughout the year 1942, Continental shipped to Atlas Steels Limited of Canada, hereinafter called "Atlas," substantial quantities of its vanadic acid under the trade name of Van-Ex and substantial quantities of a high content ferro-vanadium (seventy to eighty per cent vanadium) which it pro-

duced. The product of Continental was preferred by Atlas and other Canadian customers because of its high-vanadium content. The ferro-vanadium produced by V.C.A. and U.S.V. contained only thirty-five to forty per cent vanadium. Continental was eliminated from the Canadian market entirely in 1943 because prior thereto the defendant Electromet of Canada, a wholly owned subsidiary of Union Carbide, had been appointed as purchasing agent of the Metals Controller of Canada in the allocation of ferro-vanadium to Canadian steel firms. The defendant Electromet of Canada, under the direction of Union Carbide, made an agreement with Union Carbide, U.S.V. and V.C.A. to split the allocation of ferro-vanadium between U.S.V. and V.C.A. and to eliminate Continental entirely from the Canadian market.

37. Pursuant to the agreement thus made, Electromet of Canada refused to permit Atlas to purchase from Continental, from which it had contracted to purchase, despite the fact that Atlas demanded to be permitted to make the purchase because of its preference for Continental's product. Instead Atlas and other Canadian customers were compelled because of the agreement between the defendants Union Carbide, U.S.V., V.C.A. and Electromet of Canada to import ferro-vanadium from the United States from either U.S.V. or V.C.A. Atlas and other Canadian customers attempted throughout the year 1943 to secure shipments from Continental but were precluded from doing so by the aforesaid agreement between Electromet of

Canada, Union Carbide, U.S.V. and V.C.A. It was the intent, purpose and effect of the aforesaid agreement between-Electromet of Canada, Union Carbide, U.S.V. and V.C.A. to eliminate Continental from the business of distributing ferro-vanadium and vanadium products in Canada.

- 38. In June of 1943, M. D. Arrouet, an official of one of the defendants, orally informed Continental that it had no place in the vanadium business either in Canada or in the United States. He further informed Continental that it should desist from attempting to conclude pending negotiations for an arrangement with Climax Molybdenum Corporation to manufacture vanadium for Continental's account. The principal business of Climax was molybdenum. Arrouet threatened that if Climax undertook the manufacture of ferro-vanadium for Continental, the defendants would enter the molybdenum industry as a reprisal against Climax.
- 39. Finally in 1944, Continental was forced to leave the vanadium industry altogether. It could no longer continue to operate profitably because of the dominant position defendants had acquired in the industry by the monopolization of the raw materials; their refusal to sell Continental for processing in its plant or others with which it had contracted, as aforesaid; the elimination of Continental from the Canadian markets; the threats of reprisal for persisting in the industry; the contracts, combination, conspiracy, monopoly and attempts to monopolize, as hereinbefore stated.

#### VI.

- The Effect of the Case of United States v. Union Carbide and Carbon Corporation et al.
- 40. Under the provisions of Section 16 of Title 15, U.S.C.A., a final judgment rendered in a suit by the United States to the effect that a defendant has violated the antitrust laws shall be prima facie evidence against such defendants in any suit brought by a private party against such defendants under the antitrust laws as to all matters respecting which the said judgment would be an estoppel as between the Government and the defendants.
- 41. On June 27, 1946, the Grand Jury under the jurisdiction of the District Court of the United States for the District of Colorado returned an indictment against all of the defendants named in this complaint charging them with violations of the Sherman Act by reason of the same contracts, combination, conspiracy and monopoly as charged in this complaint.
- 42. In May of 1948, the United States Attorney filed an information against all of the defendants named herein charging them with violations of the Sherman Act by reason of the same contracts, combination, conspiracy and monopoly alleged in this complaint.
- 43. The running of the Statute of Limitations against the plaintiffs herein was suspended by the return of the said indictment and by the filing of the said information from June 27, 1946 to the date of the filing of this complaint in accordance with

the express provisions of Title 15, U.S.C.A., Section 16.

#### VII.

Effects of the Combination, Conspiracy and Monopoly in Restraint of Trade

- 44. By reason of the aforesaid violations of the antitrust laws, defendants have injured the business of plaintiffs by effectively eliminating them from the vanadium industry; they have suppressed competition and have monopolized the business of mining and processing vanadium-bearing ores, of manufacturing and distributing vanadium compounds: they have eliminated competition among themselves and prevented new competition; they have exacted monopoly profits from consumers of vanadium compounds in the United States and in Canada; the prices of ferro-vanadium and vanadium oxide have been maintained at unlawfully high and artificial levels; the prices paid for vanadium-bearing ore to independent owners and miners in the states of Colorado, Ctah, New Mexico and Arizona have been maintained at unlawfully low and artificial levels, except where necessary to engage in a preemptive buying program to prevent the raw materials from being purchased by potential competitors; and they have denied to consumers the benefits of economy and superiority of the vanadium compounds manufactured by Continental.
- 45. The injury to the business of plaintiffs was directly intended by defendants and was proximately caused by the monopolistic practices herein

alleged. Plaintiffs have lost business; the value of their trade-marks has been diminished; markets and customers which they have obtained in open competition with defendants have been taken away from them; their investments have been lost; the good will attaching to the business of Continental has been impaired—all to the damage of plaintiffs in the sum of Five Hundred Twenty-Eight Thousand Dollars (\$528,000).

Wherefore, Plaintiff Prays Judgment As Follows:

- 1. That summons issue to each of the defendants commanding it to answer the allegations contained in this complaint, and to abide by and perform such orders and decrees as the Court may make in the premises;
- 2. That plaintiffs receive with interest as damages for the injury to their business the sum of Five Hundred Twenty-Eight Thousand Dollars (\$528,000) and that the said sum be trebled to One Million Five Hundred Eighty-Four Thousand Dollars (\$1,584,000) and that the Court award reasonable attorneys' fees, all in accordance with Section 4 of the Clayton Act (15 U.S.C.A. 15) in such cases made and provided.
- 3. That the aforesaid combination and conspiracy, contracts, agreements, arrangements and understandings in restraint of interstate and foreign trade and commerce, conspiracy to monopolize, attempts to monopolize and monopolization of interstate and foreign trade and commerce be adjudged

and decreed to be unlawful, and that the contracts, agreements, arrangements, understandings and practices alleged in this complaint be adjudged and decreed to be in violation of Sections 1 and 2 of the Sherman Act.

- 4. That the Court adjudge and decree that the defendants have combined and conspired to restrain unreasonably and have conspired to monopolize, attempted to monopolize and have monopolized the interstate and foreign trade and commerce in the mining, processing, manufacturing, distribution and sale of vanadium compounds in violation of Sections 1 and 2 of the Sherman Act.
- 5. That defendants be ordered to divest themselves of such variadium or variadium-bearing ore deposits and ore-processing mills as in the opinion of this Court is deemed necessary to establish competition in the industry.
  - 6. That plaintiffs recover their costs herein.
- 7. That plaintiffs have such other and further relief as the Court may deem proper.

JOSEPH L. ALIOTO, Attorney for Plaintiff.

CADWALADER, WICKERSHAM & TAFT,
Of Counsel.

[Endorsed]: Filed July 15, 1949.

[Title of District Court and Cause.]

# ANSWER OF UNION CARBIDE AND CARBON CORPORATION AND UNITED STATES VANADIUM CORPORATION

Come now the defendants Union Carbide and Carbon Corporation and United States Vanadium Corporation severally and, answering the complaint of the plaintiffs herein, each for itself separately and not one for the other nor jointly, admit, deny and aver as follows:

- 1. They admit the averments in paragraphs 1, 4, 5 and 7 of the complaint, except the averment in paragraph 5 that all of the stock of United States Vanadium Corporation is and at all times in the complaint mentioned has been owned by the defendant Union Carbide and Carbon Corporation, which averment they deny to the extent that it alleges such ownership after November, 1935, and except the averment in paragraph 7 that Electro Metallurgical Sales Corporation is made a defendant herein. which averment they deny; they deny the averments in paragraphs 27, 28, 29, 30, 34, 37, 44 and 45, and they are without knowledge or information sufficient to form a belief as to the truth of any of the averments in paragraphs 3, 9, 10, 11, 17, 18, 24, 25, 26, 31, 32 and 35,
- 2. They admit so much of paragraph 2 of the complaint as avers that Union Carbide and Carbon Corporation and United States Vanadium Corporation transact business and may be found in San

Francisco, California; they deny that Electro Metallurgical Sales Corporation and Electro Metallurgical Company of Canada, Limited, or either of them, do or does business, maintain or maintains an office in or may be found in San Francisco, California. And further answering the averments in the said paragraph 2, they aver that Electro Metallurgical Company was liquidated and its assets transferred to Union Carbide and Carbon Corporation on November 30, 1948, and that it was dissolved January 5, 1949, that Electro Metallurgical Sales Corporation was merged with Union Carbide and Carbon Corporation March 14, 1949, and that Electro Metallargical Company of Canada, Limited, neither does business, maintains an office nor is found nor can be found in San Francisco, California, nor in the United States of America; and they are without knowledge or information sufficient to form a belief as to the truth of any of the averments in the said paragraph concerning Vanadium Corporation of America.

- 3. They admit that the stock of Electro Metallurgical Company was owned by defendant Union Carbide and Carbon Corporation until January 5, 1949; they deny all averments in paragraph 6 of the complaint which are not in this answering paragraph expressly admitted.
- 4. They deny the averments of paragraph 8 that Electro Metallurgical Company of Canada, Limited, is, or has been made, a defendant herein, that the stock of the said company was owned by Union

Carbide and Carbon Corporation at any time before December 1935, and that the said corporation maintains offices in New York, New York; and they admit the averments of the said paragraph which are not in this answering paragraph expressly denied.

- 5. Answering the averments of paragraphs 12 to 16, consecutive and inclusive, they deny that vanadium steel is used in many of the products set forth in paragraph 12, they deny that they have sold or shipped in interstate commerce vanadium oxide produced by them in Pennsylvania, they deny that they have sold or shipped in interstate commerce ferrovanadium produced by them in Pennsylvania or Illinois. They neither admit nor deny the averments of the said paragraphs which are not hereinabove in this answering paragraph expressly denied, but they demand strict proof thereof.
- 6. They admit the averments of paragraphs 19 and 20, except that they deny that Union Carbide and Carbon Corporation acquired vanadium bearing ore deposits or a vanadium oxide mill near Rifle, Colorado, or a ferrovanadium plant in Ohio, and deny that the said corporation coordinates the activities of its subsidiaries and participates in the formulation of their policies, except in so far as cooperation is legally inherent in the relationship of a parent and a subsidiary.
- 7. Answering the averments of paragraph 21, they admit that between 1937 and 1939 United States Vanadium Corporation purchased some va-

nadium bearing ores from other producers in the Colorado-Utah area; but they are without knowledge or information sufficient to form a belief as to the truth of any of the averments in the said paragraph which are not in this answering paragraph expressly admitted.

- 8. Answering the averments of paragraphs 22 and 23, they admit that there were other producers during the period alleged therein; but they are without knowledge or information sufficient to form a belief as to any of the averments in said paragraphs which are not in this answering paragraph expressly admitted.
- 9. They are without knowledge or information sufficient to form a belief as to the truth of the averments in paragraph 33 that Apex produced and Continental distributed substantial quantities of ferrovanadium and that their operation under the said contract extended from the spring of 1940 to the spring of 1942, and they are without knowledge or information sufficient to form a belief as to the truth of any of the remaining averments in the said paragraph 33.
- 10. Answering the averments of paragraph 36, they admit and aver that defendant Electro Metallurgical Company of Canada was appointed and served as purchasing agent of the Metals Controller of Canada and as such agent followed the directions of said Metals Controller of Canada.
  - 11. They are without knowledge or information

sufficient to form a belief as to the truth of the averments in paragraph 38 that the principal business of Climax was molybdenum; and they deny the remaining averments in said paragraph 38; and further answering, they aver that the said M. D. Arrouett was not and is not an officer or executive of Union Carbide and Carbon Corporation, but was and is an employee of the said corporation and was wholly without authority to speak for or to represent the said corporation in any of the matters concerning which he is alleged to have spoken, that he had and has no connection with and no authority to represent United States Vanadium Corporation. Electro Metallurgical Company, Electro Metallurgical Sales Corporation or Electro Metallurgical Corporation of Canada, Limited, in any capacity whatsoever.

- 12. They are without knowledge or information sufficient to form a belief as to the truth of the averments in paragraph 39 that in 1944 Continental was forced to leave the vanadium industry altogether or at all; and they deny the remaining averments in said paragraph 39.
- 13. Answering the averments of paragraph 41, they deny that an indictment was returned against all the defendants named in this complaint and they aver that the said indictment, on motion of the United States Attorney for the District of Colorado, was dismissed on September 21, 1948.
- 14. Answering the averments in paragraph 42, they admit that an information was filed as in the

said paragraph alleged, but they deny that it was filed against all the defendants in this action, and they deny that it charged the defendants therein with all the violations involved in this action.

- 15. The averments in paragraphs 40 and 43 are averments of conclusions of law and require no answer.
- 16. They deny all averments of the complaint herein which they have not expressly admitted or have not expressly denied, or as to which they have not averred that they are without knowledge or information sufficient to form a belief as to the truth thereof.

For a Second and Further Defense These Answering Defendants Aver:

The complaint herein fails to state sufficient facts to constitute a claim upon which relief can be granted.

For a Third and Further Defense These Answering Defendants Aver:

To the extent that the injury or injuries complained of in the said complaint were not sustained by plaintiffs, or any of them, within three years next prior to June 27, 1946, which was the date of the indictment referred to in the said complaint, relief for or on account of the said injuries, if any there were, cannot be had or recovered herein because the cause of action therefor is barred by Subdivision 1 of Section 338 of the Code of Civil Procedure of the State of California.

For a Fourth and Further Defense These Answering Defendants Aver:

To the extent that the alleged claims and alleged rights of action set forth in the complaint did not accrue within three years next prior to June 27, 1946, which was the date of the indictment referred to in the complaint, the same are barred by the statute of limitations and particularly by Subdivision 1 of Section 338 of the Code of Civil Procedure of the State of California.

For a Fifth and Further Defense These Answering Defendants Aver:

That the plaintiffs have neglected to avail themselves of any right which they might have had against these answering defendants for an undue and unreasonable length of time during which time these answering defendants have unalterably changed their position; and that the plaintiffs have been and are guilty of such delay and laches as to bar them from the relief prayed for or from any relief in equity.

For a Sixth and Further Defense These Answering Defendants Aver:

1. Throughout the war period defendants and certain subsidiaries acted for and on behalf of the United States Government and as its agent in many activities relating to uranium and vanadium, including the acquirement of ore, the operation of plants, and the disposition of products. Uranium and vanadium occur together in carnotite and roscoelite ore, the principal uranium source in the United States. These operations were governed by contracts with the Government, many of which bound the defendants to the utmost secrecy under penalty of criminal liability under the Espionage laws of the United States.

- 2. Defendants say that they cannot properly defend this case without a full and complete disclosure of their activities and the activities of the subsidiaries of Union Carbide and Carbon Corporation acting in behalf of the United States and its various agencies and a full disclosure of all of the activities of the United States in the vanadium-uranium fields.
- 3. Such disclosure, unless authorized by the proper Government authorities, would violate the criminal statutes of the United States, and therefore, unless such disclosure is so authorized, these answering defendants will ask that this action be dismissed.

Dated: San Francisco, California, November 15, 1949.

- /s/ HERBERT W. CLARK,
- /s/ MORRISON SHAFROTH,
- /s/ CLARENCE M. ODDIE.
- /s/ NORMAN J. HEARN,
  Attorneys for said Defendants.

# Demand For Trial by Jury

Defendants Union Carbide and Carbon Corporation and United States Vanadium Corporation demand a trial by jury of all issues in the above entitled action which are triable of right by a jury.

Dated: November 15, 1949.

/s/ HERBERT W. CLARK,

/s/ MORRISON SHAFROTH,

/s/ CLARENCE M. ODDIE,

/s/ NORMAN J. HEARN, Attorneys for said Defendants.

Acknowledgment of Service Attached.

[Endorsed]: Filed November 15, 1949.

# [Title of District Court and Cause.]

# ANSWER OF DEFENDANT VANADIUM CORPORATION OF AMERICA

Comes now the defendant Vanadium Corporation of America and answering the plaintiffs' complaint, admits, denies and avers as follows:

## First Defense

The Complaint fails to state a claim against said defendant upon which relief can be granted to the plaintiffs collectively or to any plaintiff severally.

## Second Defense

1. Said defendant admits that the complaint in this action purports to have been filed under "An Act to Protect Trade and Commerce Against Unlawful Restraints and Monopolies," as alleged in said paragraph, but denies that it has ever at any time engaged in any activity prohibited by said act.

- 2. Said defendant denies each and every allegation contained in paragraph 2 of the complaint, in so far as such allegations relate to it, and except as so denied states that it is without knowledge or information sufficient to form a belief as to the truth of any of the allegations contained in said paragraph.
- 3. Said defendant states that it is without any knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraphs 3, 4, 5, 6, 7 and 8 of the complaint.
- 4. Said defendant admits the allegations contained in paragraph 9 of the complaint, except it states that it has its principal executive office at 420 Lexington Avenue, New York, New York.
- 5. Said defendant states that it is without any knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraphs 10 and 11 of the complaint.
- 6. Said defendant states that it is without any knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 16 of the complaint in so far as they relate to other defendants, and states that said defendant has not produced ferro-vanadium in New York, Ohio, West Virginia or Illinois.
- 7. With respect to paragraph 17 of the complaint, said defendant denies that it entered the va-

nadium business in or about 1911; alleges that it was incorporated in or about September, 1919, and thereafter acquired certain vanadium-bearing ore bodies in the Republic of Peru and a ferro-vanadium plant at Bridgeville, Pennsylvania; admits that it acquired, prior to the year 1931, certain ore deposits and a vanadium oxide mill site in the State of Colorado; admits that it has produced vanadium oxide and ferro-vanadium in its plant in Pennsylvania from ores mined in Peru and from flue dust and other vanadium-bearing materials which it has purchased; and admits that it has produced ferrovanadium at its said plant from vanadium oxide purchased by it and from vanadium oxide produced at its plants in Colorado and Utah from ores mined in Colorado, Utah, New Mexico and Arizona. Except as herein admitted and alleged, it denies each and every allegation contained in the said paragraph of the complaint.

- 8. With respect to paragraph 18 of the complaint, said defendant alleges that an import tax was imposed by Peru prior to 1931, but was increased in or about that year; alleges that its cessation of imports from Peru beginning in 1931 was in large part due to reduction in volume of defendant's business; denies that it commenced the production of vanadium oxide or constructed or operated a vanadium mill in Colorado in 1939; and otherwise admits the allegations contained in said paragraph of the complaint.
- 9. Said defendant states that it is without any knowledge or information sufficient to form a belief

as to the truth of the allegations contained in paragraphs 19 and 20 of the complaint.

- 10. With respect to paragraph 21 of the complaint, said defendant denies that it started to purchase vanadium-bearing ores mined by independent producers in the Colorado-Utah area between 1937 and 1939, but admits that it purchased such ores in 1940 and subsequent years; and it otherwise states that it is without any knowledge or information sufficient to form a belief as to the truth of the allegations contained in the said paragraph of the complaint.
- 11. With respect to paragraph 22 of the complaint, said defendant states that it is without any knowledge or information sufficient to form a belief as to where the vanadium oxide produced in small vanadium oxide mills in the Colorado-Utah area was sold, except it admits that subsequent to 1940 it purchased certain quantities of vanadium oxide produced by certain of such mills.
- 12. Said defendant states that it is without any knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraphs 23, 24, 25 and 26 of the complaint.
- 13. Said defendant denies each and every allegation contained in paragraphs 27, 28, 29 and 30 of the complaint.
- 14. Said defendant states that it is without any knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraphs 31 and 32 of the complaint.

- 15. Said defendant denies each and every allegation contained in paragraph 33 of the complaint, except it states that it is without any knowledge or information sufficient to form a belief as to the quantities of ferro-vanadium produced by Apex and distributed by Continental, or as to operations under any contract with Apex.
- 16. With respect to paragraph 34 of the complaint, said defendant states that it is without any knowledge or information sufficient to form a belief as to the truth of the allegations contained in the first two sentences of said paragraph; and it otherwise denies each and every allegation contained in the said paragraph of the complaint.
- 17. Said defendant states that it is without any knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 35 of the complaint.
- 18. Said defendant denies each and every allegation contained in paragraph 36 of the complaint, except it states that it is without any knowledge or information sufficient to form a belief as to the truth of the following statements contained in said paragraph 36:
  - "Throughout the year 1942, Continental shipped to Atlas Steels Limited of Canada, hereinafter called 'Atlas', substantial quantities of its vanadic acid under the trade name of Van-Ex and substantial quantities of a high content ferro-vanadium (seventy to eighty per cent vanadium) which it produced. The product of

Continental was preferred by Atlas and other Canadian customers because of its high-van-adium content."

- 19. Said defendant denies each and every allegation contained in paragraph 37 of the complaint.
- 20. Said defendant states that it is without any knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 38 of the complaint, except it admits, upon information and belief, that the principal business of Climax Molybdenum Corporation was the production of molybdenum, and denies that said defendant ever threatened, or authorized anyone on its behalf to threaten, that it would enter the molybdenum industry as a reprisal against Climax.
- 21. Said defendant is without knowledge or information sufficient to form a belief as to the truth of the allegation contained in paragraph 39: "Finally in 1944, Continental was forced to leave the vanadium industry altogether." Said defendant denies each and every other allegation contained in said paragraph, and alleges that if Continental was forced to leave the vanadium industry, as alleged in said paragraph, such leaving was due to causes other than any action of any kind of said defendant, and that said defendant neither caused nor contributed to such action on the part of Continental.
- 22. With respect to paragraph 40 of the complaint, said defendant states that the allegation is a mere conclusion of law, without application to this case, and that no judgment has been rendered to the effect that said defendant has violated the

antitrust laws in any respect; it denies that said paragraph contains a true and complete statement of the provisions of section 16 of Title 15. United States Code, and begs leave to refer to said statute for a true, complete and accurate statement of the terms thereof.

- 23. Said defendant denies each and every allegation contained in paragraph 41 of the complaint, except it admits that on or about June 27, 1946, an indictment returned by the Grand Jury against certain of the defendants named in the complaint herein was filed in the District Court of the United States of America for the District of Colorado, charging the defendants named therein with violation of the Sherman Act, which indictment was dismissed on or about September 21, 1948, on motion of the United States; and it begs leave to refer to the said indictment for a true, complete and accurate statement of the charges thereof.
- 24. Said defendant denies each and every allegation contained in paragraph 42 of the complaint, except it admits and alleges that in or about September, 1948, an information was filed against certain of the defendants named in the complaint herein, which information charged the defendants named therein with violation of the Sherman Act, and begs leave to refer to the information for a true, complete and accurate statement of the charges therein contained.
- 25. Said defendant denies each and every allegation contained in paragraphs 43, 44 and 45 of the complaint.

### Third Defense

The right or rights of action set forth in the complaint did not accure within three years next before the commencement of this action.

### Fourth Defense

Any and all claims, damages and causes of action referred to in the complaint, and each and every part thereof, which did not accrue within three years of the commencement of this action are barred by the provisions of section 338, subdivision (1), of the California Code of Civil Procedure.

## Fifth Defense

Plaintiffs, and each of them, are barred by reason of laches from maintaining this action and from obtaining the relief or any part thereof prayed for in the complaint.

Wherefore, said defendant prays that it be dismissed hence with its costs of suit herein incurred, and for such other and further relief as the court may deem just and proper.

HOLLAND & HART, JOSIAH G. HOLLAND, PILLSBURY, MADISON & SUTRO, JOHN A. SUTRO,

/s/ By JOHN A. SUTRO,

Attorneys for Defendant Vanadium Corporation of America.

Acknowledgement of Service Attached.

[Endorsed]: Filed November 15, 1949.

[Title of District Court and Cause.]

### PLAINTIFFS' JURY INSTRUCTIONS

Comes now the plaintiffs in the above-entitled action and submit to the Court their jury instructions. Instructions as to the credibility of witnesses and such other general instructions as the Court deems necessary to this action have been omitted.

Dated: June 1, 1958.

/s/ JOSEPH L. ALIOTO, Attorney for Plaintiffs,

CADWALADER, WICKERSHAM & TAFT, Of Counsel.

## Instruction No. 1

The plaintiff in this action is Continental Ore Company, a partnership composed of Henry J. Leir, Erna D. Leir and Lina Schloss. This partnership is a successor in interest to the Continental Ore Corporation which was incorporated under the laws of the State of New York on June 16, 1939. On May 5, 1942, these parties formed a partnership doing business as Continental Ore Company.

The plaintiff is and has been engaged in the business of arranging for the manufacture and distribution of ferro alloys, and the distribution of nonferrous minerals, ores and metals.

The defendants in this action are as follows:

Union Carbide and Carbon Corporation, a New York corporation. This corporation directly controls and operates the following subsidiary corporations which have certain specified functions and duties. They are called units of Union Carbide and Carbon Corporation.

United States Vanadium Corporation, sometimes referred to as "U.S.V.", is a New York corporation and is the unit of Union Carbide which acquires and produces vanadium-bearing ore and vanadium oxide. Vanadium is essentially used by steel makers as an alloy which increases the strength of steel and its resistance to fatigue. It is used particularly in high speed steels and in a variety of high strength steels. U.S.V. is a part of the Alloys and Metals Division of Union Carbide.

Electro Metallurgical Company, sometimes referred to as Electromet, is a unit of Union Carbide in the Alloys and Metal Division. From January 1, 1933 to February 23, 1949, Electromet was engaged in the production of ferrovanadium and vanadium oxide, among other activities. Electromet is the brand name of Union Carbide's ferro alloys and metals. Electromet was formed in 1906 when the predecessor to Union Carbide and Carbon Company went into the business of making ferro alloys and alloying metals in electric furnaces.

The present defendant Union Carbide and Carbon Corporation was organized in November, 1917. Its units at that time included Union Carbide Company, Electro Metallurgical Company, National Carbon Company, Inc., The Prestolite Company, Inc. and the Linde Air Products Company.

After 1948, Electromet's activities in the vanadium field were assumed by Electro Metallurgical

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adium field were assumed by Electro Metallurgical Division of Union Carbide. Electro Metallurgical Sales Corporation, sometimes referred to as "Electromet Sales", is also a

Electro Metallurgical Sales Corporation, sometimes referred to as "Electromet Sales", is also a corporation in the Alloy and Metals Group of Union Carbide. Prior to March, 1949, it was engaged in distributing or selling the ferro alloys and alloying metals of Union Carbide. In March, 1949, it was merged into Union Carbide.

Electro Metallurgical Company of Canada, Limited, sometimes referred to as "Electromet of Canada", is a Canadian corporation. It is also in the Alloys and Metals Group of Union Carbide. It is in charge of the distribution or selling of ferro alloys and alloying metals of Union Carbide in Canada.

The above-mentioned defendants then are what may called the "Union Carbide defendants."

Also named as a defendant in this action is a corporation which is not owned by Union Carbide, or a subsidiary or affiliate of it. This defendant is Vanadium Corporation of America, sometimes referred to as "V.C.A." It is a Delaware corporation with its principal place of business in New York City. This corporation is engaged in the business of acquiring, producing and distributing vanadium and vanadium products. A large portion of the stock of this corporation is owned by Air Reduction Company, Inc.

#### Officers

## A. Vanadium Corporation of America

Mr. A. A. Corey, Jr. was president of Vanadium Corporation of America until 1934, at which time be was succeeded by Mr. E. D. Bransome.

Mr. Patrick J. Gibbons served as Executive Vice President of V.C.A. He has also served as a member of the Board of Directors and of the Executive Committee. He was also in charge of the production and refining of ferrovanadium and vanadium oxide.

Mr. Dennis W. Viles served as a Vice President of V.C.A. and was also in charge of mining.

Mr. Gustav Laub was a Vice President of V.C.A. and was also in charge of the distribution and sale of ferrovanadium and vanadium oxide.

Mr. F. F. Kett served as general manager of the Mining Division of V.C.A.

## B. Union Carbide and Carbon and Its Subsidiaries

The persons having overall executive supervision over the mining, production, refining and distribution of ferrovanadium and vanadium oxide of the Alloy Group of Union Carbide were:

Mr. F. P. Gormely, deceased, from January 1, 1933 to July 13, 1944:

Mr. W. J. Priestley, from July 13, 1944 to January 20, 1948:

Mr. W. E. Remmers, from January 20, 1948 to July 15, 1949; The persons in charge of the mining and/or refining of vanadium-bearing ore and the production and/or refining of vanadium oxide were:

Mr. J. R. Van Fleet, deceased, from January 1, 1933 to April 8, 1947;

Mr. Blair Burwell, Assistant to Van Fleet and Vice President, 1944 et seq.;

Mr. W. E. Remmers, from April 8, 1947 to January 20, 1948.

The persons in charge of the distribution of vanadium oxide were:

Mr. J. R. Van Fleet, deceased, from January 1, 1933 to April 8, 1947;

Mr. J. D. Swain, from April 8, 1947 to July 15, 1949.

The persons in charge of the distribution of ferrovanadium were:

Mr. J. M. Price, from January 1, 1933 to September 27, 1935; and

Mr. J. D. Swain, from September 27, 1935 to July 15, 1949.

Modified: Exception allowed. E.S.V., Judge.

## Instruction No. 2

This action is brought under the Sherman and Clayton Acts.

The plaintiffs bring their case on a specific enactment of Congress known as Section 4 of the Clayton Act. This statutes provides as follows:

"Section 4. That any person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue therefor in any district court of the United States in the district in which the defendant resides or is found or has an agent, without respect to the amount in controversy and shall recover threefold the damages by him sustained, and the cost of suit, including a reasonable attorney's fee."

It is alleged by the plaintiffs that the defendants have violated Sections 1 and 2 of the Sherman Act. Section 1 of the Sherman Act states as follows:

"Section 1. Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal \* \* \* \*"

Section 2 of the Sherman Act states as follows:

"Section 2. Every person who shall monopolize or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court."

Given: E.S.V., Judge.

#### Instruction No. 3

All of the parties defendant are corporations. In that connection I instruct you that a corporation is held to the same measure of liability as an individual. A corporation acts through its officers, directors and agents and may through one or more of them conspire with another corporation or with other individuals. Any act of an officer, director or agent of a corporation which is done within the scope of his duties or authority you may consider to be an act of the corporation itself.

Given: E.S.V., Judge.

#### Instruction No. 4

The parent corporations which are defendants in the present case and which I have mentioned are not chargeable with the acts of their subsidiary corporations solely because they are parent corporations, but if you should find that one or more of the parent corporations used their ownership of the subsidiaries to cause such subsidiaries to act in their behalf, then such parent corporations are liable for the resulting acts of the subsidiaries. For example, the defendant United States Vanadium Corporation is a wholly-owned subsidiary of the defendant Union Carbide. If you should find that Union Carbide used its direct ownership of United States Vanadium Corporation to cause the participation of it in an illegal conspiracy, monopoly, or attempt to monopolize, which, in turn, deprived the plaintiffs of opportunities to manufacture and distribute vanadium products, then you may attribute the activities of United States Vanadium Corporation to Union Carbide in your determination of whether or not the defendants, or any of them, are guilty of an illegal conspiracy.

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Loew's Inc. v. Cinema Amusements, (Tr. 1049) Approved 210 F. 2d 86, 92 (10th Cir. 1954).

Modified: E.S.V., Judge.

#### Instruction No. 5

Section 1 of the Sherman Act condemns conspiracies to restrain trade.

Section 2 of the Sherman Act condemns conspiracies to monopolize and individual attempts to monopolize any part of interstate trade and commerce.

A conspiracy is an agreement between two or more persons to do an unlawful thing or to do a lawful thing in an unlawful manner.

The antitrust laws contemplate that a conspiracy may exist between affiliates of a parent corporation.

Kiefer Steward Co. v. Joseph E. Seagrams & Sons, 340 U. S. 211, 71 S. Ct. 259.

Continental Ore Company in this action complains that the defendants have done the following, in summary:

- 1. They have conspired to restrain interstate trade and commerce by conspiring to exclude independent producers and distributors of vanadium products, to fix prices, to discriminate against independents, and to refuse to deal with independents.
- 2. They have conspired to monopolize the interstate vanadium industry so as to completely control and dominate this industry to the exclusion of other independent producers and distributors.

Continental Ore Company claims that it had the know-how and the organization to enter into the vanadium industry and to distribute large amounts of vanadium pentoxide and ferrovanadium. It claims that pursuant to the conspiracies of the defendants it has been prevented from operating successfully as a distributor of vanadium products during the period 1938 to 1944 and that the effect of these conspiracies was to virtually eliminate it from the vanadium industry after 1944.

This is their first claim. Secondly, they claim that Section 2 of the Sherman Act condemns the intention to monopolize interstate trade and commerce by individual corporations, and that each corporate defendant attempted to monopolize the vanadium industry and exclude Continental from successful operation in it, as heretofore set forth.

Thirdly, Continental claims that the affiliated companies of Union Carbide formed a separate conspiracy to monopolize the vanadium industry and to restrain trade in that industry and to exclude Continental from successful operation in the vanadium industry, as heretofore set forth.

I will now instruct you on the status of the law as to charges of the plaintiff.

Modified: E.S.V., Judge.

# Instruction No. 6 Conspiracy

Continental Ore Company, in order to prove the existence of a conspiracy need not show you an express, formal agreement to do so. You are allowed to infer the existence of a conspiracy from a course of dealings or through an exchange of words and

from acts done. An unlawful conspiracy is often formed without simultaneous action or agreement on the part of the conspirators. Plaintiffs are seldom capable by direct testimony or evidence to prove a conspiracy. Therefore, the law allows you as members of the jury to infer the existence of a conspiracy from things actually done, taking into consideration all of the facts and circumstances surrounding the conduct of the parties who are charged with the conspirancy. Proof of conspiracy, however, requires more than merely suspicion or conjecture, and there must be either direct proof of conspiracy or circumstantial evidence sufficiently strong to give rise to an inference of a conspiracy, It is sufficient, however, if the plaintiffs establish by a preponderance of the evidence, or the greater weight of the evidence, that two or more parties, in any manner, came to a mutual understanding to establish a common and unlawful design.

Interstate Circuit, Inc. v. United States (1939) 306 U. S. 208; Ball v. Paramount Pictures, Inc., (1948) 169 F. 2d 317; Wm. Goldman Theatres v. Loew's, Inc. (1945) 150 F. 2d 738; United States v. Paramount Pictures, Inc., et al. (1948), 334 U. S. 131.

Given: E.S.V., Judge.

# Instruction No. 7 Conspiracy to Monopolize

Section 2 of the Sherman Act condenus-the entering into a conspiracy, by otherwise competitive parties, to monopolize an industry.

Ladies and gentlemen, if you find that the defendants Union Carbide and/or its affiliates, and Vanadium Corporation of America conspired together, and that these two corporations together possessed over 90 per cent control of the production of vanadium oxide or over the sales of vanadium pentoxide and/or ferrovanadium, then you should find that the defendants are in violation of Section 2 of the Sherman Act.

The term "monopolize" as used in Section 2 of the Sherman Act means the joint acquisition or maintenance by the members of a conspiracy formed for that purpose, of the power to control and dominate interstate trade and commerce in a commodity to such an extent that they are able, as a group, to exclude actual or potential competitors from the field, accompanied with the intention and purpose to exercise such power.

The essential element of the illegal monopoly or monopolization charged is the existence of a combination or conspiracy to acquire and maintain the power to exclude competition to a substantial extent.

"A correct interpretation of Section 2 of the Sherman Act is that it is unlawful for parties to combine or conspire to acquire or maintain the power to exclude competitors from any part of the trade or commerce among the several states or with foreign nations, provided they also have such a power, as a group, to exceede actual or potential competition from the field and provided that they have the intent and purpose to exercise that power."

United States v. American Tobacco Co., et al. (1946), 328 U. S. 781.

Modified: E.S.V., Judge.

# Instruction No. 8 Monopolization

Section 2 of the Sherman Act also condemns the monopolization of interstate trade and commerce. This is to be distinguished from conspiracy to monopolize. For "monopolization" may be committed by one party, and it means the attainment of a position of power in an industry so as to be able to exclude others or to fix prices. Upon the attainment of such power by a single corporation, coupled with the showing of the employment of methods, means and practices which are in themselves in restraint of trade, said party has unlawfully monopolized in violation of Section 2 of the Sherman Act.

United States v. American Tobacco Co., et al. 328 U. S. 781.

Modified: E.S.V., Judge.

# Instruction No. 9 Attempt to Monopolize

Even if a party is unsuccessful in obtaining control over an industry, he may still be in violation of Section 2 of the Sherman Act if he is found to have a specific intent to acquire a monopoly position. Although the party is unsuccessful in attaining full monopoly power, he will be in violation of the antitrust laws if he has a specific intent to acquire a

position whereby he is able to exclude others or to fix prices.

The "intention" involved here is that the party had a specific intent to monopolize; that is, the evidence shows that the party possessed conscious knowledge and desire to gain monopoly.

United States v. Aluminum Co. of America, (1945) 148 F.2d 416; United States v. Socony Vacuum Oil Co. et al. 310 U. S. 150, 224, Footnote 59. Modified: E.S.V., Judge.

# Instruction No. 10 Conspiracy to Refuse to Deal With Plaintiff

It is charged by the plaintiff that the defendants conspired to refuse to sell vanadium supplies to it.

It is well established that an agreement, combination or conspiracy between two or more persons engaged in interstate commerce to withdraw or withhold customers from another, or with a class of others is violative of the antitrust laws. It is a violation of Section 1 of the Sherman Acts which condemns agreements to restrain trade.

Standard Oil Co. v. Moore, (1957) 1957 Trade Cases §68,861; Northern Pacific Ry Co. v. United States (1958) 78 S. Ct. 514.

Given: in substance. E.S.V., Judge.

# Instruction No. 11 Conspiracy to Fix Prices

It is unlawful per se for two or more competitors to fix prices, and any scheme or plan which fixes prices is unlawful under the antitrust laws. The existence of uniformity of prices between two or more competitors is relevant evidence from which it may be inferred that a conspiracy to fix prices existed.

United States v. Socony Vacuum Oil Co. 310 U. S. 150.

Modified: E.S.V., Judge.

# Instruction No. 12 Summary of Plaintiffs' Charges

If you find from the greater weight of the evidence that the defendants here conspired to monopolize the vanadium industry, and succeeded in that enterprise to the injury and damage of Continental, then Continental is entitled to prevail.

The Sherman Act condemns the conspiracy or agreement between competitors to join forces to gain control or to exclude others. If you find from the preponderance of the evidence that this conspiracy had the effect of excluding the plaintiffs from the vanadium industry or preventing Continental from operating successfully, the plaintiffs have established their case.

Further, if you find that any one of these defendants, either Union Carbide, or any one of its affiliated corporations, or Vanadium Corporation of America attempted to monopolize the vanadium industry and had the intent to exclude the plaintiffs from the industry, or used its power and resources to prevent the plaintiffs from successfully operating

in the vanadium market, or to exclude it, the plaintiffs have established their case.

Further, if you find that the affiliated corporations of Union Carbide combined and conspired to monopolize the vanadium industry and had the intent to exclude Continental from the industry, or used their power and resources to prevent Continental from successfully operating in the vanadium market, or to exclude it, the plaintiffs have established their case against these corporations.

Rejected: E.S.V., Judge.

# Instruction No. 13 Interstate Trade and Commerce

The Sherman Act applies to conduct in or affecting interstate trade or commerce. Commerce is interstate when it concerns more than one State.

Commerce comprehends intercourse for the purposes of trade in any and all of its forms, including the transportation, purchase, sale and exchange of commodities.

The business of the defendants is in interstate commerce. As to Union Carbide and its affiliates, they mined substantial quantities of vanadium ore in several states of the United States. This ore was then milled at Rifle, Colorado and Uravan, Colorado. This milled product was then shipped in substantial quantities in interstate commerce to processing plants located in Ohio, New York and West Virginia. This processed vanadium was then sold in interstate commerce in substantial quantities to

large interstate concerns and to purchasers in foreign commerce.

V. C. A. mined substantial quantities of variadium ore during most of the time herein concerned, or else acquired variadium ore from others, V. C. A. processed its milled ore in its plant in Pennsylvania from sources of supply located in Colorado, Utah, New Mexico and Arizona. It sold substantial quantities of variadium products in interstate commerce to large interstate customers and to purchasers in foreign commerce.

The activities of the defendants involved herein thus were in or affected a substantial amount of interstate commerce.

In addition, Continental was a company operating in the channels of interstate and foreign commerce.

United States v. South Eastern Underwriters' Ass'n, 322 U. S. 533; Radovich v. National Football League et al., 77 S. Ct. 390.

Rejected: E.S.V., Judge.

#### Instruction No. 14

In addition to establishing the conspiracies and plans I have outlined to you, plaintiff must also establish that these acts had a proximate impact on his business or trade which caused injury to it.

Bigelow v. R.K.O. Radio Pictures, Inc., 327 U. S. 251.

Rejected: E.S.V., Judge.

# Instruction No. 15 Damages

If you are satisfied that the plaintiff has proved by a greater weight of the evidence that the defendants have violated the antitrust laws by entering into a conspiracy to monopolize the vanadium industry, or by individually attempting to monopolize the vanadium industry, and such conduct had a proximate injurious impact on plaintiffs' business, then, you may assess damages in this action based upon probable and inferential proof as well as direct and positive proof.

The purpose of awarding damages in a private antitrust case is to put the plaintiff in as good a position as if the conspiracy or the monopolization had not occurred.

Thus, if you find that violations of the antitrust laws have occurred, the defendants, by their own wrong, have prevented you from knowing exactly and with mathematical certainty what would have occurred to plaintiffs but for these violations of antitrust laws. The law, therefore, allows you, the jury, to arrive at an award of damages based on your judgment from relevant data introduced in evidence so as to compensate the plaintiff for all damages proximately caused by the acts of the defendants which have violated the antitrust laws.

Storey Parchment Co. v. Paterson Parchment Paper Co., 282 U. S. 555; Eastman Kodak Co. v. Southern Photo Materials Co., 273 U. S. 359; Bigelow v. R.K.O. Radio Pictures, Inc., 327 U. S. 251.

Rejected: E.S.V., Judge.

# . Instruction No. 16

The antitrust laws contemplate that those who have conspired or planned to monopolize should not profit by their own wrong, and the most elementary conceptions of justice and public policy require that the wrongdoer shall bear the risk of uncertainty which his own wrong has created. The wrongdoer may not object to the plaintiff's reasonable estimate of the cause of injury or its amount, supported by reasonable data, because not based on more accurate data which the wrongdoer's misconduct has rendered unavailable.

The constant tendency of the law is to find some way in which damages may be awarded where a wrong had been done. Difficulty of ascertainment of the precise amount of damages suffered is not allowed to confuse the right of recovery for a proven invasion of a plaintiff's rights.

Bigelow v. R.K.O. Radio Pictures, 327 U. S. 359.

Rejected: E.S.V., Judge.

#### Instruction No. 17

An injured plaintiff under Section 4 of the Clayton Act is entitled to damages for the following injuries:

- The expenses involved in establishing a business;
- 2. The increased costs incurred in running the business by reason of the violations of the anti-trust laws;
- 3. The inability to make profits which would otherwise have been made but for the violations of the antitrust laws and their impact on the plaintiffs' business;
- 4. The diminished value of the plaintiffs' business by reason of its being excluded from the market by violations of the antitrust laws.

William Goldman v. Loew's Inc., 150 F.2d 738, 69 Fed. Supp. 103; Storey Parchment Co. v. Paterson Parchment Paper Co., 282 U. S. 555, 51 S. Ct. 248; Eastman Kodak Co. v. Southern Photo Materials Co., 273 U. S. 359, 47 S. Ct. 400.

Rejected: E.S.V., Judge.

#### Instruction No. 18

Continental Ore Company is entitled to an award of damages caused by the acts of the defendants during the period from October 10, 1939 to July 15, 1949.

Steiner v. Fox West Coast (9th Cir) 232 F. 2d 190; Hess v. Anderson Clayton Co., (D. C. Cal.) 20 F.R.D. 466; Aerojet Sales Co. v. Columbia Steel Co., 119 Fed. Supp. 693.

The United States complaint filed against these defendants on June 27, 1946, allowed tolling of the statute of limitations under Title 15, U.S.C.A. Section 16.

By Act of Congress, the running of the statute of limitations applicable to violations of the federal antitrust laws was suspended from October 10, 1942 to June 30, 1946.

Act of October 10, 1942, Chap. 589, 56 Stat. 781, as amended by Act of June 30, 1945, Chap. 213, 59 Stat. 306, 15 U. S. Code, Sec. 16, note.

Rejected: E.S.V., Judge.

# Instruction No. 19 Damage Calculations

Assuming that you have found that the defendants have violated the antitrust laws to the injury of the plaintiff here, as I have previously instructed you, you are entitled to award the plaintiff damages for all wrongs proximately caused by the violations of the antitrust laws on plaintiffs' trade and business.

In arriving at damages you are not to render a verdict based on guess work or speculation, but based on the relevant data and evidence submitted by the parties.

In this connection, I am going to instruct you as to what is proper in arriving at your estimate of the damages suffered.

The plaintiff has no way of knowing with a certainty what its profits or the value of the business would have been but for the violations of the antitrust laws; therefore, it can only approximate damages by the use of relevant and reasonable data.

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Plaintiff Continental claims that during the period 1938 to 1944 it was curtailed in its operations, and it lost profits that it would have otherwise obtained in a free and open competitive market denied to it by the alleged violations of the antitrust laws.

Plaintiff further claims that the defendants ended its ability to enter into the vanadium market after 1944 and effectively excluded it from this market. It therefore claims damages from 1944 to 1949 for the loss of profits that it suffered by being unable to operate at all in the vanadium industry.

In your calculation of damages, you should consider the business records of the plaintiff, the experience and know-how and knowledges of the LEIRS, the success of the defendants as disclosed in their business records, and the expert opinion of the witnesses.

If you find that in the light of this evidence the plaintiff suffered a curtailed operation during the period 1938 to 1944 which caused it to lose profits it would have otherwise made, you should award it damages to compensate for the loss of profits it so suffered.

You may further award damages for any out of pocket expenses and loss of earnings suffered by the plaintiffs in attempting to operate Continental if said expenses and loss of earnings were caused by the defendants. You may further award damages for the increased costs of operations caused by a price-fixing combination, if you should find that the defendants agreed to fix the prices of vanadium oxide and vanadium ore.

Further, if you find, in the light of this evidence, that plaintiffs suffered an inability to operate in the vanadium industry by reason of the acts of the defendants in violation of the antitrust laws after 1944, you should award damages to compensate plaintiffs for this loss of profits so suffered during the period from 1944 to July 15, 1949. To repeat, in arriving at an award of damages to restore to plaintiffs the profits which would have otherwise been made but for the conduct of the defendants, you may consider the business records of the plaintiff Continental, the business records of the defendants, and their success in the vanadium market, and the expert opinions of the witnesses.

It is proper for you to consider the share of the market controlled by the defendants and their sales and profits in the vanadium industry. It is proper for you to consider the opinions of Mr. Leir and Mr. Wolf as to what their business potentials were and what percentage of the market they estimate Continental would have achieved but for the violations of the antitrust laws by defendants which injured Continental's business.

Flinkote Company v. Lysfjord, 246 F.2d 368.

Rejected: E.S.V., Judge.

#### Instruction No. 20

In arriving at an award of damages to restore the profits that the plaintiff Continental would have obtained in a market free of violations of the antitrust laws of the defendants, you may base your award of damages on gross profits if you find that the plaintiff has satisfied you by a preponderance of the evidence or the greater weight of the evidence that it would have incurred no additional or little additional increased expenses in operating its business had it been selling vanadium products at the volume estimated by the expert witnesses.

Wm. Goldman v. Loew's, Inc., 69 Fed. Supp. 103; Triangle Conduit & Cable Co. v. National El., Prod. Corp., 152 F 2d 398.

Rejected: E.S.V., Judge.

#### Instruction No. 21

Relevancy of Other Business Success of Plaintiff

Further, in considering your estimate of the amount of damages suffered by the plaintiff, it is proper for you to consider the success of the plaintiff's business in other industries and to arrive at an award of damages based on the consideration of the growth of the plaintiff's business in free and uncurtailed industries.

Frey & Sons v. Welch Grape Juice Co. (4th Cir.), 240 Fed. 114.

Rejected: E.S.V., Judge.

#### Instruction No. 22

When you calculate damages—and I am assuming for the purpose of this instruction that you reach the point of calculating damages-your duty is to calculate as accurately as you can and honestly as you can the amount, if any, which you decide the plaintiffs have lost over the period from October 10, 1939 to July 15, 1949 by reason of the acts of the defendants. I want to make very explicit that you should not let any outside factors influence you. You should not, for example, be in any way influenced by the fact that some or all of the defendants may be large corporations. Your estimate should not be effected in any way by the fact that there are numerous defendants. It is not your job to speculate upon how or to what extent any judgment rendered in this case may be paid or who will pay it. Similarly, you should not be influenced in any way by the fact that the plaintiffs may have continued to operate their business at a profit. The question is not what earnings they did have but what additional earnings they would have had. You should not be concerned with the fact that the full amount of the damages asked in the case is large. Some cases are big cases and some are small, but in every case the damage question is the same: just what amount of damage in dollars and cents has the defendants' wrong caused the plaintiff. So, in this regard, you should not compromise at all but you should render a clear and accurate verdict for the amount of damages which you think are shown by the evidence, no more and no less.

Bigelow v. R.K.O. Radio Pictures, 327 U. S. 251, 262-3 (1951); Cape Cod Food Products v. National Cranberry Assn., 119 F. Supp. 900, 911, 917 (D. Mass. 1954); Sablosky v. Paramount Film Distributing Corp., 137 F. Supp. 929, 941 (E.D. Pa. 1955).

Rejected: E.S.V., Judge.

#### Instruction No. 23

There has been evidence offered in this case that at certain periods of time some of the defendants or their officers acted as agents of Metals Reserve Company, a government corporation. You are instructed that if any of these defendants used these agency powers for the purpose of carrying out or assisting any combination or conspiracy to restrain trade or to monopolize trade in the vanadium industry, or any actual monopolization thereof, the fact that they might have been government agents at the time does not immunize their conduct.

Furthermore a violation of the antitrust laws may be carried out by acts which standing alone may be legal, but if they form part of an illegal combination or conspiracy to restrain or to monopolize, then you may consider them together with all of the ther evidence in the case to arrive at your verdict.

For example, there is evidence in the case that during a period of time the defendant United States Vanadium Company was given authority

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to buy ore for MRC, paying therefor no more than 50c per pound. Nevertheless if that defendant arrived at those prices as a result of agreement or collaboration or concert of action with any other defendant, then the fact that it was acting as agent for MRC does not immunize conduct that is otherwise unlawful under the instructions I have given.

Crummer v. Du Pont (5th Cir.), 223 F.(2) 238; cf. United States v. Socony Vacuum Co., 310 U. S. 150.

Refused; exception allowed: E.S.V., Judge.

#### Instruction No. 24

The evidence in the case shows that at certain time the plaintiffs purchased vanadium oxide or ferrovanadium from the defendants. If you find under my prior instructions that the defendants fixed the prices for vanadium and vanadium oxide and ferrovanadium by agreement or concert of action between themselves, then you may award to plaintiffs as damages the difference between the prices charged and your estimate from the evidence of what those prices would have been in the absence of any violations formed and carried out by the defendants. In this connection you may take into consideration the prices charged by defendants on sales between themselves.

Atlanta v. Chattanooga Foundry, etc., 127 F. 23, 61, aff. 27 S. Ct. 65, 203 U. S. 391.

Refused; exception allowed: E.S.V., Judge,

# Co-conspiracy Instruction Instruction No. 25

If you find from independent evidence that there existed a conspiracy between Union Carbide or United States Vanadium Corporation and Vanadium Corporation of America such as the testimony of Blair Burwell or the Agreement of June 30, 1939, as example, then all the interoffice letters and memoranda introduced in evidence as against one party may be considered by you as admissible against the other defendants as declarations of a co-conspirator so far as they were in furtherance of the conspiracy, and such declarations of a conspirator may then be considered by you as binding on all the defendants.

Schine Chain Theatres v. United States, 334 U. S. 110, 68 S. Ct. 947; United States v. Vehicular Parking, 52 Fed. Supp. 751; Hitchman Coal & Coke Co. v. Mitchell, 245 U. S. 229, 38 S. Ct. 65.

Refused; exception allowed: E.S.V., Judge.

Acknowledgment of Service Attached.

[Endorsed]: Filed June 25, 1958.

[Title of District Court and Cause.]

INSTRUCTIONS REQUESTED BY DEFEND-ANTS VANADIUM CORPORATION OF AMERICA, UNION CARBIDE CORPORA-TION, AND UNITED STATES VANA-DIUM CORPORATION

May it please the Court:

Without waiving their right jointly or severally to request further and additional instructions which may become necessary or desirable as the trial proceeds, permission for which is hereby respectfully requested in accordance with Rule 19 of the Rules of Practice of the United States District Court for the Northern District of California, the defendants respectfully request the court to give the following instructions.

/s/ JOSIAH G. HOLLAND,

/s/ E. R. NEAHER,

/s/ JOHN A. SUTRO,

/s/ ALLAN N. LITTMAN.

Attorneys for Defendant Vanadium Corporation of America.

/s/ RICHARD J. ARCHER,

/s/ GIRVAN PECK.

Attorneys for Defendants Union Carbide Corporation and United States Vanadium Corporation.

You are instructed to return your verdict in favor of defendant Vanadium Corporation of America.

Refused: E.S.V., Judge.

Defendants' Proposed Instruction No. 2

You are instructed to return your verdict in favor of defendant Union Carbide and Carbon Corporation.

Refused: E.S.V., Judge.

Defendants' Proposed Instruction No. 3

You are instructed to return your verdict in favor of United States Vanadium Corporation.

Refused: E.S.V., Judge.

Defendants' Proposed Instruction No. 4

You are instructed that this case does not involve any issue with respect to any period prior to July 6, 1938.

Given: E.S.V., Judge.

Defendants' Proposed Instruction No. 5

The parties in this case are as follows:

Plaintiffs are Henry J. Leir, Erna D. Leir and Lina Schloss, who are partners under the trade name and style of Continental Ore Company. That company has its office and place of business at 500 Fifth Avenue, in the City and State of New York.

Defendant Union Carbide and Carbon Corpora-

tion is a New York corporation with its principal place of business at 30 East 42nd Street, New York, New York.

Defendant United States Vanadium Corporation was a Delaware corporation, all the stock of which had been owned by the defendant Union Carbide and Carbon Corporation. Its principal place of business was 30 East 42nd Street, New York, New York.

Defendant Vanadium Corporation of America is a Delaware corporation having its executive office at 420 Lexington Avenue, City and State of New York and is not affiliated in any way with the other two defendants.

Given in substance, E.S.V., Judge,

Defendants' Proposed Instruction No. 6

This action was brought to recover damages claimed to have been suffered by the plaintiffs by reason of an alleged violation of the antitrust laws of the United States. That is to say, plaintiffs contend that defendants have violated the antitrust laws and that plaintiffs were eliminated from the Vanadium industry by this alleged violation of law. Those contentions are denied by each and all of the defendants.

Given: E.S.V., Judge.

Defendants' Proposed Instruction No. 7

The gist of plaintiffs' complaint is that the part of their business concerned with brokerage and jobbing of vanadium products which they began in July, 1938, was damaged and finally eliminated in 1944 as the alleged result of an alleged unlawful combination and conspiracy among defendants to control the vanadium industry.

Plaintiffs specify that the alleged acts and practices of the defendants which directly and proximately affected them were:

- 1. Apex Smelting Company of Chicago, Illinois, with which plaintiffs had an exclusive brokerage contract to sell its ferrovanadium production, and under which operations commenced in the spring of 1940, was compelled to cease the manufacture of ferrovanadium in the spring of 1942 because it was unable to operate profitably for the reason that it was unable to obtain vanadium oxide.
- 2. The failure of plaintiffs' own operation on Long Island, New York, begun in August, 1942, because of the difficulty of securing raw materials which made it commercially impossible to operate profitably.
- 3. Imperial Paper and Color Corporation of Glen Falls, New York, was forced to abandon in 1944 a contract made in that year with plaintiffs, under which plaintiffs were to act as sales agent for Imperial's entire output of ferrovanadium and vanadium oxide. This is alleged to have been due to Imperial's and plaintiffs' inability to secure vanadium oxide or vanadium-bearing ores.
- 4. The loss in 1943 of a Canadian customer, Atlas Steels, Limited, and plaintiffs' elimination from the Canadian market as a result of activities of Elec-

tro Metallurgical Company of Canada, then the agent of the Canadian Government in the wartime allocation of ferrovanadium to Canadian steel firms. Plaintiffs further allege that these activities embraced an agreement by defendants to divide the Canadian market among themselves and exclude plaintiffs.

5. Either plaintiffs and Climax Molybdenum Corporation, or both, were deterred in June, 1943, from concluding negotiations for Climax to manufacture ferrovanadium for plaintiffs' account by threats of reprisal by an alleged official of defendant Union Carbide.

Defendants deny that they conspired or combined as aforesaid, or that any act of theirs injured plaintiffs' business in vanadium products.

Given: E.S.V., Judge.

Note: Number 5 of the alleged specified unlawful acts and practices refers to action taken by Electro Metallurgical Company of Canada as agent of the Canadian government. Defendant Union Carbide has filed its memorandum with the court in support of the proposition that it cannot be liable for such acts. If the court so rules, we respectfully request that specification number 5 be omitted from this instruction.

# Defendants' Proposed Instruction No. 8

In their answers all of the defendants and each one of them specifically deny the material allegations of plaintiffs' complaint which the Court has just summarized for you and each and every one of the claims made by the plaintiffs in their complaint.

Given: E.S.V., Judge.

Defendants' Proposed Instruction No. 9

It is the duty of the court to rule on questions of law, the admission of evidence and the conduct of the trial generally, and finally, when all the evidence is in and the jury has heard the arguments of counsel, to instruct the jury as to the law that will control and govern your determination of this case.

It is your duty as jurors to accept the law as stated by the court in these instructions and to apply it to the facts as found by you. You, the jurors, are the sole and exclusive judges of the facts. You pass upon and determine the credibility of the witnesses and the weight of the evidence. It is your duty to determine the facts based upon the evidence which has come from the witnesses and the exhibits in the case and from no other source. When you have determined the ultimate facts from a consideration of the evidence, you apply the law to the facts as found by you.

Given in substance. E.S.V., Judge.

Based upon Judge Weinfeld's instructions to the jury on February 25, 1953 (Stenographer's Notes, pp. 1545-1547) in J. J. Theatres v. Twentieth Century Fox Film Co., et al. (S.D.N.Y. No. 49-80) reversed on other grounds (2 Cir. 1954) 212 F. 2d 840.

For reasons deemed sufficient by the court, certain issues have been withdrawn from this case. You are instructed that in your deliberations you are to disregard any issues which have been withdrawn from your consideration and any comments of counsel about such issues.

Given: E.S.V., Judge.

Defendants' Proposed Instruction No. 11

You may not presume that the defendants, or any of them, are liable to plaintiffs simply because plaintiffs have sued them and filed a complaint alleging a conspiracy and resulting damages. Neither may you presume that the defendants are not liable simply because they have in their answers denied the allegations made in plaintiffs' complaint.

Given: E.S.V., Judge.

Defendants' Proposed Instruction No. 12

Counsel, in arguing this case to you, have commented upon and argued upon the facts, as is their privilege and their duty. If you find any variance between the facts testified to by the witness or as shown by the documentary evidence, and what has been stated to you by counsel to be the facts, to the extent of such variance you must consider only the facts testified to by the witnesses or as shown by the documentary evidence.

Given: E.S.V., Judge.

United States v. Dried Fruit Ass'n. of California (N.D.Cal. 1944) 4 F.R.D. 1, 6.

At times throughout the trial, the court has been called upon to pass on the question whether or not certain offered evidence might properly be admitted. With such rulings and the reasons for them, you are not concerned. Whether offered evidence is admissible is purely a question of law, and from a ruling on such a ouestion you are not to draw any inference as to what weight should be given the evidence, or as to the credibility of a witness. In admitting evidence to which an objection is made, the court does not determine what weight should be given such evidence. As to any offer of evidence that was rejected by the court, you, of course, must not consider the same. As to any question to which an objection was sustained, you must not conjecture as to what the answer might have been or as to the reason for the objection.

When the court has struck out evidence previously admitted, you are instructed that you are not to consider such evidence on any matter or for any purpose. Where the court has advised you that certain evidence is to be considered with relation to a particular defendant, you may not, of course, consider such evidence in relation to any other defendant.

Given: E.S.V., Judge.

The first paragraph of this instruction is based upon Instruction No. 36 as given by Judge Foley in United States v. Las Vegas Merchant Plumbers Ass'n. (D.C.Nev. No. 12173) affirmed (9 Cir. 1954) 210 F.2d 732, certiorari denied (1954) 348 U.S. 817.

The mere fact that plaintiffs have seen fit to join a number of parties as defendants does not mean that all or any of them are liable. Plaintiffs' claim must be judged separately as to each defendant, and the position of each defendant should be judged on its own merits.

This is especially true wherever the facts, circumstances or nature of the charges made or defenses asserted differ with regard to one defendant from those regarding all or some of the remaining defendants.

Each defendant is entitled to individual consideration of the evidence as applied to it to determine whether that particular defendant participated in any combination or conspiracy. No defendant should be prejudiced in the minds of the jurors merely because it has been named by the plaintiffs with others, as a defendant in this case.

Given: E.S.V., Judge.

#### Defendants' Proposed Instruction No. 15

You should not allow the fact that the defendants in this case are corporations to influence your verdict in any way. Whether you like or dislike corporations is beside the question. It is your duty to give these corporations the same impartial consideration in weighing the evidence and in arriving at a verdict as you would give to any individual.

Given in substance, E.S.V., Judge,

I shall now instruct you how you shall evaluate the testimony and the exhibits which have been tendered to you. It is basic to your consideration of the evidence that you bear firmly in mind that the plaintiffs have the burden of proof regarding all the issues which I have just outlined to you.

This means that on each of these issues the plaintiffs must prove their contentions by what is called a fair preponderance of the evidence. The fair preponderance of the evidence does not necessarily mean the greater number of witnesses, but it means the greater weight of the evidence taken altogether.

It is said by the courts that the preponderance of the evidence means the evidence of greater convincing force. It means evidence which satisfies the conscience and brings conviction to an intelligent mind.

You must weigh the evidence as though it were placed on a scale. If the scale is weighted in favor of the plaintiffs—that is to say, if they have produced evidence of the greater convincing force—they have sustained their burden of proof. If it is weighted in favor of the defendants or if it is evenly balanced, the plaintiffs have failed to sustain their burden. Unless you are satisfied that plaintiffs have met their burden of proof, you must return a verdict for the defendants.

Given: E.S.V., Judge.

Emich Motors v. General Motors (7 Cir. 1950) 181 F.2d 70; Northwestern Electric Co. v. Federal Power Com'n (9 Cir. 1943) 134 F.2d 740, 743, affirmed (1944) 321 U.S. 119; Bachman v. Order of United C. Travelers of America (N.D.Fla. 1943) 50 F.Supp. 87, 90.

### Defendants' Proposed Instruction No. 17

You will in no event make any finding in this case which is based on speculation and conjecture rather than competent evidence and the inferences reasonably to be drawn therefrom. It is not enough that there has been created in your minds some doubt or suspicion as to the conduct of the defendants. The plaintiffs must produce proof of such a nature as carries a conviction to your minds, such as would influence you in the conduct of your own business or daily affairs. The character of the proof must be such as you would be willing to act upon and base a judgment upon in the disposal of important matters.

Given: E.S.V., Judge.

First sentence quoted from the Court's instructions to the jury in Theatre Investment Co. v. R.K.O. Radio Pictures (W.D.Wash. Civil No. 1414) (Tr., p. 18). Remainder quoted from Judge Coleman's instructions to the jury in Theatre Enterprises v. Paramount Film Distrib. Corp. (D.C. Md.) as set forth in the opinion of the court of appeals (4 Cir. 1953) 201 F.2d 306, 314, affirmed (1954) 346 U.S. 537.

There are two kinds of evidence, direct and circumstantial. Direct evidence is that kind of evidence by which a fact is proved directly and without inference from other facts. Circumstantial evidence is that kind of evidence by which an inference of an unknown fact is drawn from the existence of known facts. In arriving at your verdict you are to consider all of the evidence, both direct and circumstantial.

Given: E.S.V., Judge.

Quoted from the court's instructions to the jury in Theatre Inv. Co. v. RKO Radio Pictures (W.D. Wash., Civil No. 1414) (Tr. p. 17).

Defendants' Proposed Instruction No. 19

Before a fact can be said to have been proved by circumstantial evidence alone, it is necessary not only that the circumstances proved by the evidence shall reasonably give rise to an inference of such fact but also that no other equally reasonable inference can be drawn from the same circumstances. If two equally reasonable inferences can be drawn from circumstances proved by the evidence, one consistent with the fact sought to be proved and the other inconsistent therewith, you should not infer the fact sought to be proved from such circumstances alone.

Given: E.S.V., Judge.

Pennsylvania R. Co. v. Chamberlain (1933) 288 U.S. 333, 339-340; J. B. Lippincott Company v.

Federal Trade Commission (3 Cir. 1943) 137 F.2d 490, 494; Standard Oil Company of California v. Moore (9 Cir. 1957) 251 F.2d 188, 210, certiorari denied (June 2, 1958).

Defendants' Proposed Instruction No. 20

In evaluating the testimony to decide whether the plaintiffs have sustained their burden of proof, you will have to decide what credibility is to be attached to the testimony of the various witnesses. Whether you believe or do not believe the witnesses, and the weight to be attached to their testimony, is a matter for your sole and exclusive judgment.

In passing upon the credibility of the various witnesses, it is your right to accept the whole or any part of their testimony, or to discard or reject the whole or any part.

It is your over-all duty to scrutinize carefully the testimony given, and in so doing you are to consider the following:

The circumstances under which the witness testified; his demeaner and manner on the witness stand; his intelligence; the extent to which his testimony is contradicted or corroborated by other evidence, if at all; the reasonableness or unreasonableness of his story; his apparent candor and fairness or the lack thereof; and any other matter which reasonably sheds light upon his reliability as a witness.

3

Given: E.S.V., Judge.

United States v. Dried Fruit Ass'n. of California (N.D.Cal. 1944) 4 F.R.D. 1, 5-6; Windsor Theatre Co. v. Walbrook Amusement Co. (4 Cir. 1951) 189 F.2d 797, 798-799.

### Defendants' Proposed Instruction No. 21

There are several modes of impeaching or discrediting a witness. He may be impeached by evidence that he has made, at other times, statements inconsistent with his present testimony. He may be impeached by contradictory evidence or by evidence that his general reputation for truth, honesty or integrity is bad. He may be impeached by evidence that he is biased against or hostile toward the party against whom he testifies. He may be impeached by evidence that he has an interest in the litigation or that there is pending litigation between him and the party against whom he testifies.

If it is shown that a witness has testified falsely in one part of his testimony, you are at liberty to disregard the testimony of that witness entirely, or in part.

Given: E.S.V., Judge.

Fed. Rules Civ. Proc., Rule 43A; Cal. Code Civ. Proc., secs., 2051, 2052, 2061 (subsec. 3); Wigmore on Evidence (3d Ed. 1940) Vol. III, sec. 949, p. 502; United States v. Cohen (3 Cir. 1947) 163 F. 2d 667, 669.

Defendants' Proposed Instruction No. 22

The purpose of the antitrust laws is to prevent and declare unlawful contracts, combinations and conspiracies designed to unduly restrain competition, or to monopolize, or to unduly obstruct the free course of trade among the different states and with foreign countries. The restrictions imposed by this law were intended to frustrate unreasonable restraints, but not to prevent the use of reasonable means to protect interstate commerce from injurious or destructive practices or the promotion of competition upon a sound basis.

Given: E.S.V., Judge.

United States vs. Dried Fruit Ass'n of California (N.D.Cal. 1944) 4 F.R.D. 1, 6-7.

Defendants' Proposed Instruction No. 23

You are instructed as a matter of law that neither of the defendants by itself possessed sufficient market power in the vanadium industry so that it could have monopolized the vanadium industry.

Refused: E.S.V., Judge.

United States v. du Pont & Co. (1956) 351 U.S. 377, 389-404.

Defendants' Proposed Instruction No. 24

The plaintiffs' complaint is brought under the anti-trust laws. In so far as this action is concerned, unless there has been agreement, combination or conspiracy among two or more persons, the antitrust laws are not applicable. While the agree-

ment, combination or conspiracy can be established by circumstantial evidence without direct proof, still when all is said and done, it is the true and ultimate fact which must prevail. Either there is some agreement, combination or conspiracy or there is not. Unless you find by a preponderance of the evidence that two or more defendants joined together in an agreement, combination or conspiracy by reason of which plaintiffs were injured, you must find for the defendants. Moreover, you cannot find against any defendant who was not a party to an agreement, combination or conspiracy by reason of which plaintiffs were injured.

Given: E.S.V., Judge.

United States v. Morgan (S.D.N.Y. 1953) 118 F. Supp. 621, 634.

# Defendants' Proposed Instruction No. 25

In this type of action, the burden is upon the plaintiffs to prove the four basic elements of their claim:

- (a) They must prove that the defendants did in fact engage in an unlawful agreement or conspiracy.
- (b) They must prove that overt acts were committed or performed by defendants pursuant to the unlawful agreement or conspiracy.
- (c) They must prove that these acts injured them and were the direct, immediate and proximate cause of such injury.
  - (d) They must prove their damages.

I shall explain all of these important terms to you as I proceed with my instructions.

Given: E.S.V., Judge.

Burnham Chemical Co. v. Borax Consolidated (9 Cir. 1948) 170 F.2d 569, 571; Suckow Borax Mines Consol. v. Borax Consolidated (9 Cir. 1950) 185 F.2d 196, 208.

Defendants' Proposed Instruction No. 26

I turn to the first element of plaintiffs' claim, the unlawful conspiracy.

An unlawful conspiracy is an agreement or understanding, express or implied, between two or more persons, to do an illegal act, or to do a legal act in an illegal manner. The essence of the conspiracy is the unlawful agreement or combination. A conspiracy is sometimes defined by the courts as a partnership in an illegal enterprise.

In this case the claim is that the defendants entered into an agreement or combination to restrain and monopolize interstate and foreign trade in vanadium products. The burden is on the plaintiffs to establish the existence of such a conspiracy during the time plaintiffs were in business. If you find that the plaintiffs have not proved that there was such a conspiracy between the defendants, you should not consider any other issues in the case and you must return a verdict for the defendants.

Given: E.S.V., Judge.

United States v. Kissel (1910) 218 U.S. 601, 607-608; U. S. v. Socony-Vacuum Oil Co. (1940) 310

U.S. 150, 253-254; United States v. Dried Fruit Ass'n of California (N.D.Cal. 1944) 4 F.R.D. 1, 7; Marino v. United States (9 Cir. 1937) 91 F.2d 691, certiorari denied (1937) 302 U.S. 764; Lynch v. Magnavox Co. (9 Cir. 1938) 94 F.2d 883, 889.

# Defendants' Proposed Instruction No. 27

The mere fact that the businesses of defendants in the production and sale of ferrovanadium and vanadium oxide when added together constitute a large percentage of the business of producing and selling such products in the United States is not a fact from which, standing alone, you can find or infer that defendants have combined or conspired to monopolize interstate trade or commerce within the meaning of section 2 of the Sherman Act.

Refused: E.S.V., Judge.

# Defendants' Proposed Instruction No. 28

The law recognizes the right of any trader or manufacturer engaged in a private business freely to exercise his own independent discretion as to the parties with whom he will deal or refuse to deal.

Given: E.S.V., Judge.

: United States v. Colgate & Co. (1919) 250 U.S. 300: Times-Picayune Publishing Co. v. United States (1953) 345 U.S. 594, 625; Paramount Film Distributing Corp. v. Applebaum (5 Cir. 1954) 217 F.2d 101, 124.

# Defendants' Proposed Instruction No. 29

If a prospective buyer indicates to a seller in advance that he would not buy at the seller's current price for similar sales, the seller's failure to offer goods at that price does not evidence a refusal to deal.

Given: E.S.V., Judge

Standard Oil Company of California v. Moore (9 Cir. 1957) 251 F.2d 188, 203, certiorari denied (June 2, 1958).

# Defendants' Proposed Instruction No. 30

The court instructs you that if any defendant acted on the basis of its own business judgment, no inference of conspiracy can be drawn against that defendant, even though after weighing all of the circumstances your own personal opinion might be that the defendant's judgment was incorrect. You cannot find that the defendants entered into an unlawful agreement or conspiracy because you disagree with their business judgment.

Given: E.S.V., Judge.

G. & P. Amusement Company v. Regent Theatre Company (N.D. Ohio 1952) 107 F.Supp. 453, 459.

# Defendants' Proposed Instruction No. 31

You are instructed that mere uniformity of prices in the sale of commodities such as vanadium products are not in themselves sufficient evidence of an unlawful agreement or conspiracy since uniformity in price may result solely from economic forces. Given: E.S.V., Judge.

Based upon Pevely Dairy Co. v. United States (8 Cir. 1949) 178 F.2d 363, 368-370, certiorari denied (1950) 339 U.S. 942.

Defendants' Proposed Instruction No. 32

You may consider diversity of business practices among defendants as tending to show the absence of any unlawful agreement or conspiracy among them.

Given: E.S.V., Judge.

United States v. Morgan (S.D.N.Y. 1953) 118 F.Supp. 621, 634, 699-700; Tag Mfgrs. Institute v. F.T.C. (1 Cir. 1949) 174 F.2d 452.

Defendants' Proposed Instruction No. 33

In reaching a conclusion as to the existence of the conspiracy as charged and whether each defendant was a member, you must do so without regard to, and independent of, the acts and declarations and statements of the others.

The existence of the conspiracy cannot be established against any co-defendant by the acts or declarations of his alleged co-conspirators done or made in his absence. The existence of the conspiracy and each defendant's connection with it must be established by independent proof based upon the reasonable inferences to be drawn from such defendant's own acts, his own declarations and his conduct.

Given: E.S.V., Judge.

Glasser v. United States (1942) 315 U.S. 60, 74-75; Mayola v. United States (9 Cir. 1934) 71 F.2d 65, 67.

Defendants' Proposed Instruction No. 34

The acts or statements of employees, agents or officers of a corporation can only be considered as acts or statements of that corporation if the evidence shows that the corporation through its shareholders, board of directors or authorized management officers vouched for part or all of an employee's, agent's or officer's statement.

It is not necessary to show that the statement was expressly vouched for. If authorized management officers direct that business be conducted in reliance upon a particular intramural statement or report, and it is so conducted without reservation, the corporation has by implication, adopted the statement or report, and is chargeable with it as an admission.

Given: E.S.V., Judge.

Standard Oil Company of California v. Meore (9 Cir. 1957) 251 F.2d 188, 218, certiorari denied (June 2, 1958).

Defendants' Proposed Instruction No. 35

Evidence of acts and declarations of agents or employees of each of the defendants are not to be considered as evidence against other alleged members unless you first find from substantial evidence, independent of such acts or declarations, that there was a conspiracy between the defendants. 90

Given: E.S.V., Judge.

Glasser v. United States (1942) 315 U.S. 60, 74-75; Standard Oil Company of California v. Moore (9 Cir. 1957) 251 F.2d 188, 219, certiorari denied June 2, 1958).

Defendants' Proposed Instruction No. 36

Before you may find the existence of an unlawful agreement or conspiracy by circumstantial evidence alone, the facts relied upon must be of such nature and so related that it is the only conclusion that can fairly and reasonably be drawn from them. It is not sufficient that the facts and circumstances merely be consistent with the conclusion sought to be established. They should be inconsistent with any reasonable theory to the contrary.

Given in substance. E.S.V., Judge.

United States v. Aluminum Co. of America (S.D. N.Y. 1939) 1 F.R.D. 1; Standard Oil Company of California v. Moore (9 Cir. 1957) 251 F.2d 188, 210, certiorari denied (June 2, 1958); Metropolitan Casualty Ins. Co. v. Smith & Smith (9 Cir. 1932) 58 F.2d 699.

Defendants' Proposed Instruction No. 37

If you find that any defendant adopted a business practice similar to that of another defendant, this is circumstantial evidence from which various inferences may be drawn. It is plaintiffs' contention that such similar business practice, if any you find, is reasonably consistent only with unlawful agreement or conspiracy among defendants. It is

defendants' contention that such similar business practices as you may find are either the result of the standardized nature of their products or of other economic factors confronting all defendants alike, or the result of the necessity upon each defendant to meet its competition, or the result of a belief independently arrived at by each, defendant that such business practice was least expensive, most efficient or otherwise the best course for it to follow.

Plaintiffs have the burden of proof on this issue. You must find for the defendants unless you find that the inference suggested by plaintiffs is the only conclusion that can fairly and reasonably be drawn from the similarity of business practices of any of the defendants.

Given: E.S.V., Judge.

Theatre Enterprises v. Paramount Film Distrib. Corp. (4 Cir. 1953) 201 F.2d 306, affirmed (1954) 346 U.S. 537; Fanchon & Marco Inc. v. Paramount Pictures (S.D. Cal. 1951) 100 F.Supp. 84, affirmed (9 Cir. 1954) 215 F.2d 167, certiorari denied (1953) 345 U.S. 964.

## Defendants' Proposed Instruction No. 38

The last instruction which the Court has given you, is intended to advise you as to what is an unlawful agreement or conspiracy. The Court does not mean to suggest by any instruction given by the Court, that the existence of an unlawful agreement or conspiracy has been established. That question, like the other questions of fact in this case, is for you to decide.

The Court will now instruct you as to the rules which you must follow in evaluating the evidence for the purpose of determining whether or not an unlawful agreement or conspiracy has been proved.

Refused: E.S.V., Judge.

## Defendants' Proposed Instruction No. 39

Only if you find (1) that defendants entered into an unlawful conspiracy in violation of the antitrust laws; (2) that they performed overt acts in furtherance thereof; (3) which acts proximately caused injury to the plaintiffs, will you reach the question as to how to fix the plaintiffs' damages, if any. I will give you instructions on the question of damages in a later part of this charge.

Refused: E.S.V., Judge.

## Defendants' Proposed Instruction No. 40

Not only must the plaintiffs in this case prove a conspiracy in violation of the antitrust laws; they must, in addition, show that the defendants committed or performed overt acts in furtherance of that unlawful conspiracy. Plaintiffs are private parties suing for damages. This is not a governmental suit. Private parties, unlike the Government, must prove more than a public wrong; they must prove that the public wrong is a private wrong to them. Private civil antitrust actions are founded not upon the mere existence of a conspiracy, but upon injuries which result from the com-

mission of forbidden overt acts by the conspirators. Therefore, no private action accrues from the mere agreement or conspiracy itself, because standing alone a conspiracy does not invade any private rights. The plaintiffs must accordingly prove that in carrying out the conspiracy which they claimed existed, the defendants performed overt acts which have had a direct detrimental impact upon their business. The burden is on the plaintiffs to establish such overt acts.

Given: E.S.V., Judge.

Burnham Chemical Co. v. Borax Consolidated (9 Cir. 1948) 170 F.2d 569, 571; Glenn Coal Co. v. Dickinson Fuel Co. (4 Cir. 1934) 72 F.2d 885, 887; Suckow Borax Mines Consol. v. Borax Consolidated (9 Cir. 1950) 185 F.2d 196, 208; Momand v. Universal Film Exchange (D.Mass. 1942) 43 F.Supp. 996, 1007, affirmed (1 Cir. 1948) 172 F.2d 37; Wolfe v. National Lead (N.D.Cal. 1953) 15 F.R.D. 61.

# Defendants' Proposed Instruction No. 41

The court in instructing you concerning the measure of damage does not mean to intimate in any way that plaintiffs are entitled to recover in this case. Neither should the fact that counsel for the parties have discussed the question of damages be considered by you in determining whether or not the plaintiffs are entitled to recover in this case. That is a question which is left solely for you to determine upon the law and the evidence.

Refused: E.S.V., Judge.

V

Emich Motors Corp. v. General Motors Corp. (7 Cir. 1950), 181 F.2d 70.

Defendants' Proposed Instruction No. 42

In determining whether or not plaintiffs have been injured and damaged by reason of the defendants' alleged unlawful conspiracy, you must determine whether or not plaintiffs have established with reasonable certainty that but for the conspiracy they would have had vanadium products to sell and would have sold them at a profit.

Given: E.S.V., Judge.

Wolfe v. National Lead Company (9 Cir. 1955), 225 F.2d 427, 431.

Defendants' Proposed Instruction No. 43

The damages which you may properly award to plaintiffs, if you find that plaintiffs have any right to recover damages, are limited to those actual damages which can be determined from the evidence, and do not include claimed damages which are merely speculative, remote or uncertain. Actual damages must be proved by facts from which their existence is logically inferable and cannot be supplied by conjecture.

Given: E.S.V., Judge.

Keogh v. C. & N. W. Ry. Co. (1922), 260 U. S.
156, 165; Ronson Patents Corp. v. Sparklets Devices (E.D. Mo. 1953), 112 F. Supp. 676, 692;
Ebeling v. Foster & Kleiser Co. (W.D. Wash. 1935), 12 F. Supp. 489.

# Defendants' Proposed Instruction No. 44

In determining whether plaintiffs were injured or damaged as a result of the alleged unlawful activities of the defendants, you may consider the conditions of business prevailing at the time, including abnormal shortages in vanadium products caused by war, the effect of government controls upon the maximum sale prices of vanadium products, government purchasing policies for both vanadium ore and finished products, export embargoes, and government priority and allocation regulations upon domestic distribution.

Given: E.S.V., Judge.

Wolfe v. National Lead Company (9 Cir. 1955), 225 F.2d 427, 431.

Defendants' Proposed Instruction No. 45

If you find that plaintiffs stopped such business as they may have had in ferrovanadium or vanadium oxide at a time when they were able to buy vanadium oxide from any supplier, whether that supplier might have been either of the defendants or any other person or Government agency, at prices which would have enabled the plaintiffs to make a profit, then you cannot find that plaintiffs lacked supplies of vanadium products to sell as a result of the activities of the defendants or any of them.

Given: E.S.V., Judge.

Rushing v. Metro-Goldwyn-Mayer Distributing

Corp. (5 Cir. 1954), 214 F.2d 542, 544; American Can Co. v. Russellville Canning Co. (8 Cir. 1951), 191 F.2d 38, 55-56.

## Defendants' Proposed Instruction No. 46

You are instructed that plaintiffs are not entitled to recover any element of damages which could have been avoided through the exercise of reasonable efforts on their part. Plaintiffs are not entitled to increase their damages through in action, but must take all reasonable steps to mitigate their damage and reduce their loss. In determining whether plaintiffs have discharged their duty to mitigate damages, you may consider whether reasonable men in plaintiffs' position would have accepted offers made to them, either before or after they ceased their vanadium business, to supply them with vanadium oxide at prices which would have permitted them to operate at a profit. You may consider whether reasonable men in plaintiffs' position could have made arrangements to process ferrovanadium and whether reasonable men in their position would have made additional efforts to find either suppliers of vanadium oxide or processors of ferro vanadium.

If you find that by any of these means plaintiffs could reasonably have avoided the cessation of their vanadium business or could have recommended it at any later time, you must limit plaintiffs' damages to those losses they would have suffered had they taken such steps.

Given: E.S.V., Judge.

American Can Co. v. Russellville Canning Co. (8 Cir. 1951), 191 F.2d 38, 55-56.

# Defendants' Proposed Instruction No. 47

If you find that plaintiffs suffered damage by reason of the alleged unlawful activities of the defendants, you are to proceed to determine the amount of damages so caused to plaintiffs.

In this case plaintiffs' claim for damages is based upon the claim that they lost profits as a result of the alleged unlawful activities of the defendants. Plaintiffs must prove the, amount of such lost profits, if any, only by evidence from which a just and reasonable inference can be drawn. You may not speculate as to the amount. Your determination must be based on evidence as to the persons from or through whom plaintiffs would probably have been able to obtain vanadium products, persons to whom plaintiffs would probably have been able to sell the vanadium products they so obtained, and the net profit which plaintiffs would probably have obtained on any such transactions.

Given: E.S.V., Judge.

Wolfe v. National Lead Company (9 Cir. 1955), 225 F.2d 427, 431; Central Coal & Coke Co. v. Hartman (8 Cir. 1901), 111 Fed. 96, 100, 102; O'Halloran v. American Sea Green Slate Co. (2 Cir. 1915), 229 Fed. 77, 81.

Defendants' Proposed Instruction No. 48

In the event that you find by a preponderance of the evidence that plaintiffs were injured by the acts of the defendants, you are instructed that this alone is not sufficient to permit you to award damages to the plaintiffs. Injury to the plaintiffs individually is not sufficient to warrant recovery by plaintiffs in a civil action under the antitrust laws. Plaintiffs, in addition, must establish by a preponderance of the evidence that the acts which caused them injury were part of an illegal agreement or conspiracy which was reasonably calculated to prejudice the public interest by unduly restricting the free flow of interstate commerce. In other words, even if you should find that there were acts of the defendants directed at plaintiffs alone, this is not sufficient. You must find that defendants were engaged in a conspiracy to injure the general public by restraining the free flow of interstate commerce, and that it was by reason of this general conspiracy that plaintiffs' business was destroyed.

Given: E.S.V., Judge.

Shotkin v. General Electric Co. (10 Cir. 1948), 171 F.2d 236; Feddersen Motors, Inc. v. Ward (10 Cir. 1950), 180 F.2d 519; Klor's Inc. v. Broadway Hale Stores (9 Cir. 1958), CCH Trade Reg. Rep., par. 69,007.

Defendants' Proposed Instruction No. 49

Plaintiffs are in no event entitled to damages for any period prior to October 10, 1941.

Refused: E.S.V., Judge.

Cal Code Civ. Proc., sec. 340, subd. 1.

Defendants' Proposed Instruction No. 49A Plaintiffs are in no event entitled to damages for any period prior to October 10, 1939.

Given in substance: E.S.V., Judge. Cal. Code Civ. Proc., sec. 338, subd. 1. [Endbreed]: Filed June 25, 1958.

[Title of District Court and Cause.]

# DEFENDANTS' REQUESTED REVISED AND ADDITIONAL INSTRUCTIONS

May it please the Court:

Defendants respectfully request the court to give the following additional jury instructions Nos. 7A, 21A, 23A, 30A and 50, and withdraw Nos. 7, 21, 23, 34 and 39 of the instructions previously proposed by defendants.

Dated June 20, 1958.

- /s/ JOSIAH G. HOLLAND.
- /s/ EDWARD R. NEAHER,
- /s/ JOHN A. SUTRO,
- /s' ALLAN N. LITTMAN,

Attorneys for Defendant, Vanadium Corporation of America.

- /s/ RICHARD J. ARCHER,
- /s/ GIRVAN PECK,

Attorneys for Defendants, Union Carbide Corporation and United States Vanadium Corporation.

Defendants' Proposed Instruction No. 7A

The gist of plaintiffs' complaint is that the part of their business concerned with brokerage and 100

jobbing of vanadium products which they began in July, 1938, was damaged and finally eliminated in 1944 as the alleged result of an alleged unlawful combination and conspiracy among defendants to control the vanadium industry.

Plaintiffs specify that the alleged acts and practices of the defendants which directly and proximately affected them were:

- 1. Apex Smelting Company of Chicago, Illinois, with which plaintiffs had an exclusive brokerage contract to sell its ferrovanadium production, and under which operations commenced in the spring of 1940, was allegedly compelled to cease the manufacture of ferrovanadium in the spring of 1942 because it was unable to operate profitably for the reason that it was unable to obtain vanadium oxide.
- 2. The failure of plaintiffs' own operation on Long Island, New York, begun in August, 1942, because of the alleged difficulty of securing raw materials which made it commercially impossible to operate profitably.
- 3. Imperial Paper and Color Corporation of Glen Falls, New York, was allegedly forced to abandon in 1944 a contract made in that year with plaintiffs, under which plaintiffs were to act as sales agent for Imperial's entire output of ferrovanadium and vanadium oxide. This is alleged to have been due to Imperial's and plaintiffs' inability to the vanadium oxide or vanadium-bearing ores.

Defendants deny that they conspired or combined as aforesaid, or that any act of theirs injured plaintiffs' business in vanadium products.

Given; modified: E.S.V., Judge.

Defendants' Proposed Instruction No. 21A

There are several modes of impeaching or diserediting a witness. He may be impeached by evidence that he has made, at other times, statements inconsistent with his present testimony. He may be impeached by contradictory evidence, or by evidence that he is biased against or hostile toward the party against whom he testifies.

If it is shown that a witness has testified falsely in one part of his testimony, you are at liberty to disregard the testimony of that witness entirely, or in part.

Given: E.S.V., Judge.

Fed. Rules Civ. Proc., Rule 43; Cal. Code Civ. Proc., sees. 2051, 2052.

Defendants' Proposed Instruction No. 23A

This case does not concern monopolization or attempted monopolization or restraint of trade by any one defendant nor by the Carbide companies as a group. It concerns only the plaintiffs' claim that defendant Vanadium Corporation of America and the Carbide defendants together agreed, conspired or combined to monopolize or to restrain trade unreasonably. Unless you find such an agreement there is no violation of law in the present

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case. It is only an agreement, conspiracy or combination to do these things with which we are concerned. Unless you find by a preponderance of the evidence that the defendants in the Union Carbide group\_joined together with the defendant Vanadium Corporation of America in an agreement, combination or conspiracy, by reason of which plaintiffs were injured, you must find for the defendants.

Refused: E.S.V., Judge.

United States v. U. S. Steel Corp. (1920), 251 U. S. 417, 444-445; United States v. Aluminum Co. of America (2 Cir. 1945), 148 F.2d 416, 432; Alexander Milburn v. Union Carbide & Carbon Corp. (4 Cir. 1926), 15 F.2d 678, certiorari denied (1927) 273 U. S. 757.

# Defendants' Proposed Instruction No. 30-A

The Court instructs you that to the extent that any defendant acted on behalf of the Government of the United States or on behalf of one of its agencies or services, and in the scope of its duties in that regard, any such actions cannot be violations of the antitrust laws. No such actions form any proper part of plaintiffs' proof of conspiracy to monopolize or to restrain trade in the present case, nor may plaintiffs recover any damages which may have resulted from such actions.

Given: E.S.V., Judge.

Parker v. Brown (1943), 317 U. S. 341, 352; Stroud v. Benson (E.D. N.C. 1957), 155 F. Supp. 482, 493; Keogh v. C. & W. Ry. Co. (1922), 260 U. S. 156, 165.

Defendants' Proposed Instruction No. 50

In measuring the damages, if any, to which plaintiffs may be entitled you are not to consider gross profits in fixing the amount of damages. You must limit your consideration to the net profits or losses of the plaintiffs in determining what net profits, if any, they lost by reason of the unlawful activities of the defendants.

Plaintiffs must satisfy you by a preponderance of the evidence that they would in fact have made net profits in addition to any net profits they actually made and they must furnish you with a fair and reasonably accurate standard for measuring just what that additional net profit would have been. If they have not furnished you with such a standard and if you have no means of ascertaining what their damages may be other than by speculation and guess work, in such event you must return a verdict for the defendants.

Given, as modified: E.S.V., Judge.

Wolfe v. National Lead Company (9 Cir. 1955), 225 F.2d 427.

[Endorsed]: Filed June 25, 1958.

104 Continental Ore Company, et al., vs.

[Title of District Court and Cause.]

#### VERDICT

We, the Jury, find in favor of the Defendants.

/s/ JOB P. DODD, JR., Foreman.

Filed June 24, 1958, at 4 o'clock and 50 minutes p.m., by Willard I. Wesling, Deputy Clerk.

[Endorsed]: Filed June 24, 1958.

In the District Court of the United States, Northern District of California, Southern Division

#### No. 29008-H

CONTINENTAL ORE COMPANY, et al.,
Plaintiffs,

VS.

UNION CARBIDE AND CARBON CORPO-RATION, et al., Defendants.

#### JUDGMENT

This action having been tried and a general verdict for the defendants having been duly rendered on the 24th day of June, 1958,

It is considered and adjudged by the Court that the plaintiffs take nothing by their complaint and that the same be dismissed and that the defendants have judgment on the verdict against the plaintiffs upon the issues in this action and recover from the said plaintiffs their costs taxed at \$......

By the Court: June 25, 1958.

/s/ EDGAR S. VAUGHT, United States District Judge.

Approved as to form:

/s/ JOSEPH L. ALIOTO, Attorney for Plaintiffs,

/s/ JOSIAH G. HOLLAND,

Attorney for Defendant, Vanadium Corporation of America,

/s/ RICHARD J. ARCHER,

Attorney for Defendants, Union Carbide Corporation and United States Vanadium Corporation.

[Endorsed]: Filed June 25, 1958.

[Title of District Court and Cause.]

# NOTICE OF APPEAL

Notice is hereby given that plaintiffs in the aboveentitled action, Continental Ore Company, a partnership, and Henry J. Leir, Erna D. Leir and Lina Schloss, as individuals and as partners under the trade name and style of Continental Ore Company. hereby appeal to the Court of Appeals for the

Ninth Circuit from the Judgment entered in this action on June 25, 1958.

Dated June 30, 1958.

/s/ JOSEPH L. ALIOTO, Attorney for Plaintiffs.

[Endorsed]: Filed July 15, 1958.

[Title of District Court and Cause.]

#### CERTIFICATE OF CLERK

I, C. W. Calbreath, Clerk of the United States District Court for the Northern District of California, hereby certify the foregoing and accompanying documents and exhibits, listed below, are the originals filed in this Court in the above-entitled case and constitute the record on appeal herein as designated by counsel for the parties:

Excerpt from Docket Entries;

Complaint;

Answer of Vanadium Corporation of America;

Answer of Union Carbide and Carbon Corporation and United States Vanadium Corporation;

Interrogatories by Plaintiff to Union Carbide and Carbon Corporation and Vanadium Corporation of America;

Objections of Union Carbide and Carbon Corporation to Interrogatories by Plaintiff:

Notice and Objections of Vanadium Corporation of America to Interrogatories by Plaintiff:

Answers of Union Carbide and Carbon Corporation to Interrogatories by Plaintiff;

Answers of Union Carbide and Carbon Corporation to Interrogatories by Plaintiff;

Order on Objections to Interrogatories;

Answers of Union Carbide and Carbon Corporation to Interrogatories by Plaintiff:

Answers of Vanadium Corporation of America to Interrogatories by Plaintiffs;

Ruling of Court on Defendants' Objections to Demand for Production;

Answers of Vanadium Corporation of America to Certain Interrogatories by Plaintiffs;

Supplement to Answers of Union Carbide and Carbon Corporation to Interrogatories by Plaintiff;

Interrogatories by Union Carbide and Carbon Corporation and United States Vanadium Corporation to Plaintiffs;

Answers of Plaintiffs to Interrogatories by Defendants;

Stipulation substituting "Vanadium Corporation of America" for "Union Carbide and Carbon Corporation and United States Vanadium Corporation";

Order Granting Leave to file Amendment to Answer of Vanadium Corporation of America;

Amendment to Answer of Vanadium Corporation of America;

Order Granting Leave to file Amendment to Answer of Union Carbide and Carbon Corporation and United States Vanadium Corporation;

Amendment to Answer of Union Carbide and Carbon Corporation and United States Vanadium Corporation;

Request of Plaintiff for Admissions by Defendants:

Objections of Union Carbide Corporation and United States Vanadium Corporation to request of Plaintiff for Admissions;

Response of Union Carbide Corporation and United States Vanadium Corporation to Request for Admissions:

Response of Vanadium Corporation of America to Request for Admissions:

Interrogatories by Plaintiffs to Defendants;

Objections of Union Carbide Corporation and United States Vanadium Corporation to Interrogatories by Plaintiff:

Order on Objections of Union Carbide Corporation and United States Vanadium Corporation to Interrogatories by Plaintiff:

Verdict:

Judgment:

Memorandum of Union Carbide Corporation and United States Vanadium Corporation Regarding Actions Undertaken on Behalf of the Government of Canada in Time of War, with Exhibits thereto;

Notice of Appeal;

Cost Bond on Appeal;

Order Staving Execution:

Supersedeas Bond;

Appellants' Designation of Record on Appeal;

Appellees' Designation of Record on Appeal;

Reporter's Transcript of Trial Proceedings; Plaintiffs' Exhibits 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 66, 67-A, 67-B, 67-C, 67-D, 67-E, 67-F, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 113,

114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 142, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170 and 171;

Defendant, Union Carbide and Carbon Corporation, exhibits A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, 2-a, 2-b, 2-c, 2-d, 2-e, 2-f, 2-g, 2-h, 2-i, 2-j, 2-k, 2-l, 2-m, 2-n, 2-o, 2-p, 2-q, 2-r, 2-s, 2-t, 2-u, 2-v, 2-w, 2-x, 2-y, 2-z, 3-a, 3-b, 3-c, 3-d, 3-e, 3-f, 3-g, 3-h, 3-i, 3-j, 3-k, 3-l, 3-m, 3-n, 3-o, 3-p, 3-q, 3-r, 3-s, 3-t, 3-u, 3-v, 3-w, 3-x, 3-y, 3-z, 4-a, 4-b, 4-c, 4-d, 4-e, 4-f, 4-g, 4-h, 4-i, 4-j, 4-k, 4-l, 4-m, 4-n, 4-o, 4-p, 4-q, 4-r, 4-s, 4-t, 4-u, 4-v, 4-w, 4-x, 4-y, 4-z, 5-a, 5-b, 5-c, 5-d, 5-e, 5-f, 5-g, 5-h, 5-i, 5-j, 5-k, 5-l, 5-m, 5-n, 5-o, 5-p, 5-q, 5-r, 5-s, and 5-t;

Defendant, Vanadium Corporation, exhibits 1-a, 1-b, 1-c, 1-d, 1-e, 1-f, 1-g, 1-h, 1-i, 1-j, 1-k, 1-l, 1-m, 1-n, 1-o, 1-p, 1-q, 1-r, 1-s, 1-t, 1-u, 1-v, 1-w, 1-x, 1-y, 1-z, 2-a, 2-b, 2-c, 2-d, 2-e, 2-f, 2-g, 2-h, 2-i, 2-j, 2-k, 2-l, 2-m, 2-n, 2-o and 2-p.

I further certify that the Plaintiffs' Exhibits 32, 65, 126, 139, 140 and 141 are not included in this record for the reason they do not appear in the records in this office.

In witness whereof, I have hereunto set my hand and affixed the seal of said District Court this 21st day of August, 1958.

[Seal] C. W. CALBREATH, Clerk,

> /s/ By MARGARET P. BLAIR, Deputy Clerk.

Also 2 maps not marked.

The United States District Court, Northern District of California, Southern Division

No. 29008

CONTINENTAL ORE COMPANY, a partnership, et al., Plaintiffs,

VS.

UNION CARBIDE AND CARBON CORPO-RATION, et al., Defendants.

# REPORTER'S TRANSCRIPT

Monday, June 2, 1958, 10:00 o'clock a.m.

Before: Hon. Edgar S. Vaught, Judge.

Appearances: For the Plaintiffs: Joseph L.

Alioto, Maxwell Keith, John E. Sullivan, Donald Garibaldi; for the Defendant, Union Carbide and Carbon Corporation: Messrs. Morrison, Forester, Holloway, Shuman & Clark, by Richard J. Archer; for the Defendant, Vanadium Corporation of America: Messrs. Pillsbury, Madison & Sutro, by Allan N. Littman, J. G. Holland and E. R. Neaher.

Mr. Holland: In any event, these facts, ladies and gentlemen, were all in the possession of the Antitrust Division of the United States Government which brought a case against these defendants, a criminal case, charging these [55] defendants with violation of the antitrust laws. That case was tried in Denver, Colorado, a year ago, approximately, this same time, and resulted in the acquittal of all of the defendants in this case, and that's another reason why we feel that these early matters should not be gone into and the case should not be dragged out by them. We feel that the case should start with the coming of Mr. Lear to this country.

Mr. Alioto: If your Honor please, we have had a good deal of pre-trial discovery with respect to undisputed facts and particularly with respect to the existence of certain mills and the statistics on the sales of oxide and ferrovanadium. At this time plaintiff will offer its exhibits first in order responses to interrogatories previously propounded

Page numbers appearing at top of page of Reporter's Transcript of Record.

to both Union Carbide and Vanadium Corporation of America which set forth the production of fused vanadium oxides from various mills of each of the defendants for the period 1933 to 1947.

Mr. Archer: What is the reference number?

Mr. Alioto: This is 8-G of yours, United States Vanadium Corporation, and it is Exhibit 3 of the Vanadium Corporation of America, setting forth the total vanadium oxide from 1933 to 1947, and then there is a quantity of other vanadium products submitted by Union Carbide under Interrogatory 8-G. We offer this as plaintiff's exhibit first in order.

Mr.: Archer: 8-G is in that?

Mr. Alioto: Yes.

Mr. Holland: If the Court please, we have no objection to the statistics, but this raises right off the bat the question of how far back we are going to go. These statistics go back to the year 1933.

The Court: You will be limited to what has transpired since 1938.

Mr. Alioto: How does your Honor wish to handle [63] this physically so far as the document itself is concerned? All these statistics are on the same document. We can have them rewritten at some later time.

The Court: Very well. It will be admitted with the understanding that that portion of it which relates to what occurred prior to 1938 will not be submitted to the Jury.

(The document in question was thereupon received in evidence and marked Plaintiff's Exhibit 1.)

Mr. Alioto: We will offer as plaintiff's exhibit next in order the figures heretofore offered by the defendants, Vanadium Corporation of America and Union Carbide Company with respect to the quantitative yearly total of ferro-vanadium produced in the years 1933 to 1947.

The Court: The same ruling will be made on that.

(The document in question was thereupon received in evidence and marked Plaintiff's Exhibit 2.)

Mr. Alioto: This matter comes up, I take it, on an objection to the figures prior to 1938.

The Court: Yes.

Mr. Alioto: And I take it nothing need be done to preserve our record on the matter.

The Court: No.

Mr. Alioto: We offer as next in evidence with respect to both corporations figures previously secured by pre-trial discovery relating to the domestic sales of the [64] Vanadium Corporation of America and of Union Carbide of total pounds of ferrovanadium and pentoxide in the years 1933 to 1944. They are in such form that all these figures are on one sheet, your Honor.

The Court: That will be admitted insofar as it refers to the sales after 1938.

(The document in question was thereupon received in evidence and marked Plaintiff's Exhibit 3.)

Mr. Alioto: At this time, if your Honor please, we offer as our exhibit next in order the price lists of the Union Carbide Company for a period in 1933 up through 1944, showing the prices at which vanadium products were sold by the Union Carbide Company.

Mr. Archer: May I see that?

Mr. Alioto: Yes.

Mr. Archer: One of these was corrected. The vanadium oxide prices are not correct. You have them in the answers to the requests for admissions. If you want to put it in subject to correction, that is all right.

Mr. Alioto: The problem is they are not segregated here so I do not see how I could have an alternative. We will put the other answer in and that will clearly appear, I think. We will offer it subject to that condition, if your Honor please.

The Court: Very well. That will be admitted insofar as it relates to matters after 1938.

(The document in question was thereupon received in evidence and marked Plaintiff's Exhibit 4.)

Mr. Alioto: Plaintiff offers as its exhibit next in order the price lists of the Vanadium Corporation of America covering the period of time from 1933—the prices of ferro-vanadium and pentoxide—down to the period of time through 1945.

The Court: Same ruling.

(The document in question was thereupon received in evidence and marked Plaintiff's Exhibit 5.)

Mr. Alioto: If your Honor please, we won't stop now to read some of these things to the Jury. We think we can present them in some kind of tabular form that will make some sense and be intelligible.

We offer now pre-trial statements of the Vanadium Corporation of America setting forth the location of the mills of that company and the time of acquisition of those mills.

The Court: What dates does that refer to?

Mr. Alioto: If your Honor please, the date indicates the original acquisition, for example, on September 16th, 1919, of a plant at Bridgeville; but they had that plant during the entire period of time here involved.

Mr. Holland: May I see it?

Mr. Alioto: Yes. [66]

Mr. Holland: We have no objection to that.

Mr. Alioto: Attached to that same exhibit, if your Honor please, is the same information with respect to the United States Vanadium Corporation showing the location of their mills and the location of their plants for the manufacture of ferro-vanadium as well.

Mr. Holland: Do you have the references to the interrogatories so I can write them down? It will save me time looking at them.

Mr. Alioto: This one is in Interrogatory Number 7.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 6.)

[See Book of Exhibits.]

Mr. Alioto: Along those same lines, giving more specific dates with respect to the acquisition of certain plants, we offer the Answer of the Vanadium Corporation of America to Interrogatory Number 7 that we acquired in the pre-trial proceedings.

Mr. Holland: Is the question on there?

Mr. Alioto: The question reads, "State the location of any mills and refineries for the processing of vanadium bearing materials or for the manufacture of ferro-vanadium owned, operated or leased by you or your subsidiaries and the length of time each has been under the ownership and lease."

Mr. Holland: We object to the extent that the question calls for mills owned by the defendant or leased during [67] a period prior to 1938.

The Court: Does that limit the time?

Mr. Alioto: If your Honor please, so far as I know, all the mills and the properties set out here were operated by the Vanadium Corporation after 1938.

The Court: Very well. Let it be admitted.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 7.)

[See Book of Exhibits.]

Mr. Alioto: We offer as our exhibit next in order the Answer of Vanadium Corporation of

America to Interrogatory Number 17, setting forth the volume by years of vanadium oxide purchased from Union Carbide by the Vanadium Corporation of America for the period from 1933 through 1939 and the prices at which this vanadium oxide was purchased by these defendants.

Mr. Holland: That is subject to the same ruling, if your Honor please?

Mr. Alioto: I submit, if the Court please, I would like to make a statement with respect to that.

The Court: It will be admitted insofar as it involves 1938 and after, not prior thereto.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 8.)

[See Book of Exhibits.]

Mr. Alioto: We will offer next in evidence the Answer to Interrogatory Number 19, which discloses a joint operation of certain vanadium bearing ore mines by the Vanadium [68] Corporation of America and Union Carbide during the year 1939. That is the Answer by each of the defendants in this case.

Mr. Archer: This refers to the years 1939 and 1940, your Honor.

The Court: Admit it.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 9.)

Mr. Holland: We would like to enter our objection to the admission of that exhibit at all in evidence in that this is not based on a period of time, your Honor, because this comes after the

1938 period. This was an agreement under which, on payment of a toll charge, the United States Vanadium Corporation mined and milled ore belonging to the Vanadium Corporation, and delivered the oxide to the Vanadium Corporation, paying a toll charge of 65 cents to 75 cents a pound. We make the objection for the reason that we are concerned here with activities or alleged activities which damaged Mr. Leir, and this has no evidentiary bearing upon the damage suit.

Mr. Alioto: I submit, if your Honor please, that that is being offered under the issue of conspiracy and combination to violate the anti-trust laws during the period of time in question.

The Court it may be admitted. Exception allowed. I do not see its materiality now, but we will come to that later. [69]

Mr. Archer: Your Honor, may I interpose here just a moment? Rather than have me stand up every time Mr. Holland stands up, could it be understood that if one of us makes an objection it will go for both unless—

Mr. Holland: Unless disavowed.

Mr. Archer: Unless disavowed.

The Court: I suppose that last won't be considered as a conspiracy.

Mr. Alioto: I am sure we will have a lot of that during this trial, if your Honor please, and more so than we had in the older days.

If your Honor please, I understand the Court's ruling with respect to the period of time involved. For purposes of the record, however, we at this

time think that in the sequence of the presentation we should offer into evidence the basic agreement for the sale of a million pounds of vanadium oxide, one million to one and a quarter million from one defendant to the other. The contract is dated September, 1933, and there are other contracts bringing that up through January, 1936. We will offer that in evidence at this point.

Mr. Holland: We object, your Honor.

The Court: Objection sustained.

Mr. Alioto: In a separate category are similar contracts for the sale of material between one defendant to the other which are dated November 18th, 1938 and June 30th, [70] 1939, respectively. One is for the sale of 130,000 pounds of vanadium oxide at 80 cents a pound and the other is for the sale of one carload at 80 cents a pound with a correction to 65 cents a pound, the first date being November 18th, 1938, and the second June the 30th, 1939. We offer them jointly as one exhibit.

Mr. Holland: Your Honor, we enter the same objection that we did to the—not based on time—the one you overruled.

The Court: This is within the date period. Overruled. Exception allowed.

Mr. Alioto: This is during the same period of time they were refusing to supply oxide to the plaintiff.

Mr. Holland: If the Court please, may I ask that Mr. Alioto in offering his exhibits, since there is a question of admissibility, not to quote immediately the exhibits until they have been admitted?

Mr. Alioto: That exhibit has been admitted.

The Court: The exhibit will be admitted. Exception allowed.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 10.)

Mr. Alioto: We offer as our exhibit next in order, your Honor, a document dated September 1944, from Mr. J. L. Robinson of the United States Vanadium Corporation, that [71] is, the Union Carbide group, to Mr. Blair Burwell, Vice-President of the United States Vanadium Corporation, which sets forth a history of ore prices charged by the United States Vanadium Corporation from October of 1938 through May of 1944. This is the price list of the pricing formula of the United States Vanadium Corporation for the purchase of ore, and we expect to offer following this the same document of prices paid by Vanadium Corporation for ore. We will offer it in evidence.

The Court: Submit it to Counsel, please. Let it be admitted.

Mr. Alioto: I suggest that they be admitted as one exhibit.

(The documents referred to were thereupon received in evidence and marked Plaintiff's Exhibit 11.)

[See Book of Exhibits.]

Mr. Alioto: We offer in evidence as our exhibit next in order the mining claims on vanadium bearing ore owned by the defendant United States

Vanadium Corporation. These mining claims we secured in answer to an interrogatory, if your Honor please, and they list the date of acquisition of these various mining claims as well as the location of the mining claims involved.

Mr. Archer: A great many of these are prior to 1938 and on that ground I object.

The Court: Are any of them prior to 1938?

Mr. Alioto: Yes, your Honor. This is their [72] entire acquisition program, but the exact date is shown in each case. Many of them are within the period, many prior to the period.

Mr. Archer: This is patented and non-patented mining claims containing vanadium bearing ore which have been owned by United States Vanadium Corporation, and then it lists the date of acquisition. To those that show prior to 1938 I object.

The Court: The objection is sustained as to those prior to 1938.

Mr. Alioto: May I state in respect to those, and I think Mr. Archer can check me if I am inaccurate, that though acquired prior to 1938, they were held in 1938 and forward.

The Court: You can state what they held in 1938.

Mr. Alioto: Well, all of these were held at that time, if your Honor please. The date of acquisition -in other words, they may have acquired it in 1927 but they had it 1938 on.

The Court: How would the date of acquisition be material?

À.

Mr. Alioto: It simply shows the date of acquisition, if your Honor please, but these are mining claims in existence as of 1938.

The Court: That is all right. Let it be admitted.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 12.)

[See Book of Exhibits.]

Mr. Alioto: We offer the same kind of list of mining claims on the Colorado Plateau owned by the defendant Vanadium Corporation of America.

Mr. Holland: There is no substantial merit to this, but to keep my position consistent I will object to that prior to 1938. Practically everything was acquired after 1938.

The Court: Admit it.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 13.)

Mr. Alioto: We offer as our exhibit next in order, pursuant to pre-trial discovery, a document setting forth all of the purchases of vanadium ore concentrates and vanadium source materials made by the Vanadium Corporation of America from the dates 1933 to 1944. The document does not segregate them in any other way as to date.

Mr. Holland: To which we object to all references prior to 1938, your Honor.

The Court: The objection is sustained. It will be admitted without exception.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 14.)

Mr. Alioto: We offer a similar document secured in pre-trial discovery prepared by the Union Carbide organization showing purchases made from the period 1933—but there [74] are only a few purchases made then—through 1942 in the one case, this being a statement of flue dust, vanadic acid and ferro-vanadium purchased and a statement showing the vanadium bearing materials purchased from others, excluding vanadium ore, during the period 1936 to 1945. However, the document, though requesting information for that period, has the information in the years 1939, 1940, 1941, 1942, 1943 and 1944. I do not see anything of 1936 on that document. These are materials purchased from independent sources, so-called.

Mr. Archer: There are a few 1933 purchases. I do not think they are particularly significant, but to preserve the record I will make the same objection.

The Court: The same order will be made.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 15.)

Mr. Alioto: We offer next, if your Honor please, a document secured in pre-trial discovery which sets forth the identity of the purchasers of vanadium products from these defendants, and this document is set forth to show the buyers of vanadium products they had in each of the years from

1933 to 1944, disclosing whether or not they purchased in that year. We will offer that as plaintiff's exhibit next in order.

Mr. Holland: To which we enter the chronological objection, objecting to anything prior to 1938.

The Court: The objection will be sustained as to all items prior to 1938.

(The documents referred to were thereupon received in evidence and marked Plaintiff's Exhibit 16.)

Mr. Alioto: We offer as against Mr. Holland's client, the Vanadium Corporation of America, the same listing with respect to customers. This is a breakdown setting forth the customers for each of the years from 1933 through 1944.

Mr. Holland: I am sorry. I thought you said

the last one.

Mr. Alioto: Union Carbide was the one offered previously.

Mr. Holland: I object to this one on anything

prior to 1938.

The Court: The same ruling will apply. That portion prior to 1938 will be excepted.

(The documents referred to were thereupon received in evidence and marked Plaintiff's Exhibit 17.)

Mr. Alioto: We offer, if your Honor please, a statistical study prepared by the Union Carbide defendants or one of its affiliates setting forth the production from each of its plants for the period—it comes from their file—for the period 1927 to

1945, showing the production from each of its plants as well as production from other plants, such as Gateway Alloys, Vanadium Corporation of America, the production, both private and governmental, of the Vitro Chemica! [76] Company, North Continental Mines, Blanding, Nisley and Wilson and others. We offer that as plaintiff's exhibit next in order. It is on one document, if your Honor please, which comes from the files of the defendant in this form.

Mr. Archer: Your Honor, this document was handed to me by Counsel the other day and I have not been able to check either the accuracy or where it was made and it does go back to 1926. It also has certain Canadian figures and I would object entirely to the Canadian figures on the ground of the memorandum which I previously submitted, and I would have to object at this time on the ground that no foundation was laid. I have not been able to check to see whether this was made by us. It is my guess that this was used, prepared, or one of the papers used in preparing an exhibit for the prior litigation, and so consequently I do not believe it would be a business record of our company. It would be specially prepared, and until I could object to it I would want to object to it on the ground there is no foundation.

The Court: What is the statement of Counsel as to where that came from?

Mr. Alioto: This document came from the gentleman who is the Vice-President and a Director of the United States Vanadium Company, Mr. Burwell. However, since the question of foundation has been raised, if the Court please, I think it is admissible, but Mr. Burwell is going to be here; and we will [77] ask him about it, unless the Court wants to rule on it at this time.

The Court: Let it be admitted subject to further objection except that portion prior to 1938.

Mr. Holland: Are you just offering that against Union Carbide?

Mr. Alioto: I am offering it at this point against Union Carbide only.

Mr. Archer: Did your Honor rule on the Canadian statistics in there?

Mr. Alioto: We think they are relevant, if your Honor please.

The Court: Canadian?

Mr. Alioto: Yes, Mr. Leir marketed in the Canadian market from the United States.

The Court: When?

Mr. Alioto: It covers the period, as everything else does, of this study made by them, not by us. It covers the period 1927 to 1945 but has the Canadian figures for the period 1931 to 1945 for each year.

Mr. Archer: I would object to not only prior to 1938 but even through the later period because, as alleged in the Complaint, the department we are talking about, Electromet of Canada, was operating as the agent of the Canadian Government.

Mr. Alioto: I do not think we have reached that question here. This is simply the status of the

Canadian market at the time. It was a market in which we marketed.

The Court: Let it be admitted with the exception of what occurred prior to 1938, and this other matter can be raised later.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 18.)

Mr. Alioto: If your Honor please, we offer as our exhibit next in order—and again I say we make no attempt to read them to the Jury at this time but to have them in some kind of tabular form at a later time after the evidence has been admitted—we offer in evidence as our exhibit next in order the number of total requirements contracts for ferro-vanadium and for vanadium oxide made by each of these defendants, as well as the volume in pounds that was sold under these total requirements contracts. They cover the years 1933 to 1949. As I say, the answers were procured for all those years without segregation on one piece of paper.

Mr. Archer: How do you tell which is which defendant?

Mr. Alioto: One shows, "VCA"---

Mr. Archer: I think you ought to mark on there—

Mr. Alioto: You have no objection to my marking "Union Carbide"? This is an exhibit, if your Honor please, to an interrogatory and the identification of the corporation was [79] was made on the first page of the interrogatory. Is there any question about that, Mr. Archer?

Mr. Archer: I assume that is correct.

Mr. Alioto: If there is any question about it, we will substitute.

Mr. Holland: We make the usual objection to the period prior to 1938 and then, your Honor, I think we should point out that, as alleged in the Complaint, and as we admit, and as these figures show, we, as all others in the ferro-alloy industry, entered into requirements contracts with the steel mills. We would make a contract with a steel mill to supply all of its requirements for a year, whatever they would give us. I believe Mr. Leir has done the same thing and also has taken requirements contracts from one of the defendants at least here. We do not think that it has any probative value whatever in this case, the fact that we made the usual, customary total requirements contract with the purchaser year by year in the industry which we did.

Mr. Alioto: I submit, your Honor, that if the evidence shows that two people have 100% of an industry—

The Court: What difference does it make if they owned it all?

Mr. Alioto: That is the point I want to make, if your Honor please. If two people have 100% of an industry, and each of them makes total requirements contracts which [80] obligate the buyer not to buy from anybody else—

The Court: Well, if there is nobody else interested in the proposition but those two, how would that be a monopoly?

Mr. Alioto: But there was somebody interested in the proposition, because we tried to sell them and we came up to a situation where people—

The Court: Is it your contention they were required to sell if they didn't want to sell?

Mr. Alioto: No, I do not think I have made plain the background of this point. These are requirement contracts between the Vanadium Corporation of America, for example, and its customers, and between Union Carbide and its customers, which obligate its buyers, the steel mills and others, not to purchase from the plaintiff.

The Court: Is that in the exhibit now, your statement?

Mr. Alioto: Yes, your Honor.

Mr. Holland: No.

The Court: Let it be admitted except that portion that relates to incidents prior to 1938.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 19.)

The Court: Exception allowed.

Mr. Alioto: Now, then, we offer, if your Honor please, a statement of profits from the year 1933 to 1947 in [81] the uranium-vanadium business of each of the defendants involved, being answers to Interrogatory Number 33, as previously pointed out, to each of these defendants. And again, if your Honor please, that does cover the period 1933 to 1947 on one sheet of paper without segregation, but we offer the entire document in order to preserve our record.

130

The Court: Let it be admitted subject to the elimination of that portion prior to 1938.

Mr. Alioto: Thank you.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 20.)

Mr. Archer: Your Honer, I guess I was a little slow. May the record show an objection on the grounds that our profits on these materials is irrelevant, ours being an entirely different business from the plaintiff's business.

The Court: What is the purpose of the exhibit?

Mr. Alioto: The purpose, if your Honor please, is that it appears from recent decisions of the Court of Appeals for the Ninth Circuit—

The Court: Don't argue the case. Just tell me what the exhibit is.

Mr. Alioto: The purpose is to show the facts, the state of the industry, the vanadium industry, and the facts relating to the vanadium industry during the period of time when the plaintiff was operating in it. [82]

The Court: The objection will be sustained. Exception allowed.

Mr. Alioto: We offer next, if your Honor please, a statement secured in prior discovery in this case setting forth the vanadium bearing ores mined by each of the defendants for the period 1933 to 1947 in terms of—

The Court: What is that again? State that again.

Mr. Alioto: These are the vanadium bearing

ores mined by them and vanadium bearing ores purchased by each of the defendants for the period 1933 to 1947. We will offer that in evidence as our exhibit next in order.

Mr. Holland: Objection to anything prior to 1938, your Honor.

The Court: It will be admitted subject to the elimination of that portion prior to 1938.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 21.)

Mr. Alioto: Finally, on this statistical matter, if your Honor please, we offer in evidence the certified copies from the Bureau of Mines of the United States setting forth for the United States Vanadium Corporation all of the ore produced by it in terms of V2O2 content, that is, in terms of vanadium content, for the years 1933 to 1947.

Mr. Archer: The only year prior to 1938 is 1937 in here, your Honor. [83]

The Court: I beg your pardon?

Mr. Archer: It shows the year 1937 on this exhibit of the United States Vanadium Corporation and after that year we object. It shows production only for each of the years 1937 to and including 1947, and I object to the year 1937 and then 1945 to 1947 after the plaintiff went out of business.

The Court: It is sustained so far as 1937 is concerned. I do not know about the other yet.

Mr. Holland: Is this offered for the purpose of impeaching our figures? I see some slight variations here.

Mr. Alioto: No, you will recall your figures are based upon ores mined, not with respect to vanadium content. Then after the proceedings before Judge Harris we worked out an arrangement where your reports to the Bureau of Mines setting forth the V<sub>2</sub>O<sub>5</sub> content would be done. It was pursuant to that arrangement that we secured those figures, and they show the situation for 1940 to 1947.

Mr. Holland: There is nothing before 1938 on our exhibit.

The Court: Very well.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 22.)

[See Book of Exhibits.]

Mr. Alioto: I offer now the material for the Vanadium Corporation of America that Mr. Holland and I have just discussed as plaintiff's exhibit next in order. [84]

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 23.)

[See Book of Exhibits.]

Mr. Alioto: Now we offer in evidence, if your Honor please, and I think this will conclude our statistical picture from which we will offer tabulations at a later point, the answers to Interrogatory 8-H by the Union Carbide Corporation and by Vanadium Corporation of America, setting forth the quantity of vanadium oxide and vanadium bearing ore, and in the case of the Vanadium Corporation of America, ferro-vanadium as well, which each of

these defendants purchased from the Metals Reserve Company in the years 1943 and 1944.

Mr. Holland: No objection.

The Court: Let it be admitted.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 24.)

Mr. Alioto: At this time, if your Honor please, the plaintiff proposes to call its first witness. I note it is three o'clock and I do not know your Honor's practice with respect to recesses here.

The Court: We will have a ten minute recess at this time.

(Recess.) [85]

Mr. Alioto: If your Honor please, there are two short matters I would like to clear up. I believe that during the objections on the matter of the chronology of the years involved that counsel and I sometimes used the expression "after '38" or "since '38" and sometimes "before '38." Now, it is my understanding that the ruling up to this point excludes matters prior to '38. Is that correct?

The Court: That's right.

Mr. Alioto: So that the year '38 would be in?

The Court: Well, it would be the date—

Mr. Alioto: The date of the Apex contract is July of 1938, the first contract.

The Court: The first act of your client.

Mr. Alioto: It would be July of 1938.

The Court: That would make it prior to July of 1938,

Mr. Alioto: All right.

Now, then, if your Honor please, the Court excluded a document with respect to the profits of this company from the years '33 to '47, and I would like it marked for identification so that it will be in the record.

The Clerk: Defendants' 20 marked for identification.

(Document re profits of defendants 1933-1947 marked for identification Plaintiff's Exhibit 20.) [86]

Mr. Alioto: The Court also excluded-

The Court: What is it? I didn't get your statement as to what it is you are offering.

Mr. Alioto: This exhibit was excluded by the Court which showed the profits of these defendants and I would like it marked so that we will have a record on the exclusion, if your Honor please, marked for identification.

The Court: The objection is sustained on that. The Clerk: That is Exhibit 20 for identification.

Mr. Alioto: The Court also excluded the contract of September, 1933, between the two defendants, which we would also like marked for identification so that it will be identified in the record as an excluded ontract.

The Clerk: Plaintiff's Exhibit 25 for identification.

(Contract of September, 1933, between defendants marked for identification Plaintiff's Exhibit 25.)

Mr. Alioto: The plaintiff will call Mr. Blair Burwell.

## BLAIR BURWELL

a witness on behalf of the plaintiff, having been first duly sworn, testified as follows:

The Clerk: State your name, your occupation and your address to the Court and jury. [87]

The Witness: My name is Blair Burwell. My profession is mining engineer. My residence is in Grand Junction, Colorado.

## Direct Examination

- Q. (By Mr. Alioto): Mr. Burwell, you were at one time a vice president of the United States Vanadium Corporation, were you not?
  - A. That's correct.
  - Q. You were also a-

The Court: Just a moment. What is that corporation?

Mr. Alioto: A vice president of the United States Vanadium Corporation, which is one of the affiliates of the Union Carbide.

The Court: All right. I understand.

- Q. (By Mr. Alioto): You were also a director of the United States Vanadium Corporation, were you not, Mr. Burwell?
  - A. During a period of that time.
- Q. And you were also the general mining superintendent of that organization for a period of time, were you not?
- A. No, I was the assistant to the vice president in charge of operations, general assistant of the manager or—we never used the "superintendent of operation" term, just to be correct.

Q. Now, Mr. Burwell, would you be good enough to tell us something about your professional and educational background and experience? [88]

A. By education, I first served in the school of hard knocks, of course as all mining engineers do, and I started first science and engineering under—at the University of Denver in 1910, particularly the rare metals—under a very good teacher, Dr. Engle. And after a break, during the war, and while I was earning money to go through school, I entered the Colorado School of Mines and graduated in 1919 with a degree of engineering in mines, with particular attention and majored in what was called the rare metals, which was radium, uranium, and all these things that involved this Colorado Plateau area.

I continued in my profession. Up to the present time I have held many corporate positions. Professionally, I have acted as the appraiser for the Department of Justice in the Colorado Plateau on the extent and value of the vanadium lands for the Ute Indian settlement case. I have written, of course, many technical documents. I am an active consultant—I have an active—I have been a consultant for the Atomic Energy Commission, in writing technical articles, analysis of ore deposits of the Colorado Plateau containing vanadium, uranium, some of which are still subject to secrecy classification. I have published probably a dozen various articles on the science and technology of uranium, vanadium and tungsten. [89]

At the present time I am nearing retirement, I am director of three or four companies that are engaged in the mining business. I am a director of the Federal Home Loan Bank Board, which is rather a strange assignment for a mining engineer. I am also a director of the Metal Mining Fund of the State of Colorado, which has to do with the resources of that State.

That's about the essence of it.

Q. Now, then, having given us your professional background, would you be good enough to give us a statement or a short sketch of your various corporate relationships, particularly with reference to the defendants herein involved?

A. I will start in '38. At that time I was in charge of the operations of the mills and mines of the United States Vanadium Corporation producing vanadium and uranium.

1941 and '42. '42 I became vice president of that company. I continued in that position until 1947.

I was also vice president of the Union Mines and Development Company and a director of that company. That company was a top secret company. It was organized to appraise the world resources of uranium which closely involved the Colorado Plateau.

I also had an assignment in the military intelligence at that time which concerned the same matter.

Prior to this period my background went back [90] to—my first contact with the mining of these particular ores, the production of vanadium, began

(Testimony of Blair Burwell.) in 1919, and has continued, with a few interruptions, since that time.

At the present time my corporate interests, I am president of the Salt Lake Tungsten Company—we have mines—refineries in Salt Lake City. I am a director of that company.

I am chairman of the Board of the Minerals Engineering Company. That company organized to develop the vanadium and uranium resources in 1948.

I am director of the Climax Uranium Company which operates a large processing plant producing both vanadium and uranium in Grand Junction, Colorado.

I am also—I have these other positions, outside of the mining field, which I think I have already covered.

- Q. Now, Mr. Burwell, would you be good enough to give us the nature of your experience on what has been called the Colorado Plateau, and if you would be good enough to locate that for us to start with, and then give us your experience on that?
- A. Yes, I will do so and endeavor to make it as non-technical as a mining engineer can, and I will speak in this regard in the professional sense, the description. I think—
- Q. In that connection, did you bring certain ores with you that are typical of the ores mined on the Colorado Plateau?

  A. That is true. [91]

Mr. Alioto: If your Honor please, I wonder if

we could use this table either near the witness or have him step down to this table.

The Court: What is your question again?

Mr. Alioto: My question is to develop the nature of the Colorado Plateau and his experience.

The Court: Let him tell us about it. I would like to hear it. Let him tell what it is.

The Witness: Well, if your Honor please, I would be very glad to do so in simple language, and I think there are samples of ore here and some—that contain the vanadium and uranium.

The Court: I don't care anything about the ore. I want to know—he is asking you for this territory. Now, what territory is ordinarily—

The Witness: The territory of the Colorado Plateau, your Honor and the jury, covers an area somewhat greater than any one single State. It covers approximately 160,000 square miles, and roughly the Colorado Plateau n. ans the plateaus that are on the range of the Colorado River and some rough canyon country, and over that thousands and thousands of square miles of country there are layers of standstone rocks that went in them, there are hundreds of thousands of occurrences of vanadium and uranium-bearing ore. The extent of it now covers much of the State of New Mexico, a good deal [92] of the State of Arizona, the western part of Utah, the western part of the State of Colorado, and extends up into Wyoming.

The Colorado Plateau, your Honor, is probably the richest mining district in the United States at 140

(Testimony of Blair Burwell.)

this time with a value in terms of its vanadium, its uranium and its potentials for the future. So it's not a single mine. The ores that occur there contain both vanadium and uranium. They are in the same mineral. They are invisible. The economics are all the same. The processing of one or the processing of the other throughout the years the Colorado Plateau has been developed have usually controlled the development of this great resource. There is no region, no region in the world, as important to the security of the United States as the Colorado Plateau is today, and the fact that the Colorado Plateau has been developed as a result of the atomic energy program and the unselfish contributions of the Union Carbide Company and other companies in developing this area is one reason now, at the brink of atomic threat, that we can sit comfortably in the United States and say, well, it isn't here yet and maybe we will be all right.

So it is a country, it is a deposit, it is an area far beyond a chunk of rock or a bit of policy in regard to who sold which and what. However, as the ores of this country had special markets and that they had to seek their outcome through special developments, through limited special markets. not like gold or silver or copper that you can sell to the Mint, the [93] development of this great resource of the Colorado Plateau has been intermittent, alternately boom and bust. We have the great uranium boom at the present time that peo-

ple know about. Its output today is running approximately a third of a billion dollars a year. And in terms of the security of the United States there is probably no part of this whole United States as important to the average little guy, the average citizen, as the Colorado Plateau.

Now, in this whole picture you have an ore-we have an ore—there is a piece of ore—I won't belabor you with the technical description-but that ore, the mining of it, the developing of it, has either been for vanadium or for uranium or for one or the other, has been on the dumps or one or the other has been utilized and, therefore, the billion dollar prize of this great region rested on the control of the special industries that were developing the region. There probably never was, in my thirty-five years as a mining engineer, throughout the world such a rich prize that was so difficult to tell anybody about. There's probably the secrecy angle alone on this thing; the lawyers, antitrust cases, the fighting and pulling back and forth and conflict of the control for this region has utterly confused the issue, your Honor.

Now, while this case, Continental Ore, is here before you and the jury, it is only a small part of this picture. Today I can say this, as a professional engineer, as a qualified [94] person, with Q elearance of the Atomic Energy Commission, that this field today has broken all of the old restraints. The market limitations which I have complained so much about in my endeavors to operate an area,

it is now something for the American engineers, the American companies that contribute to be proud of.

We're going back to '38 in this picture and so, as I testify here with no particular interest and nonetheless the last debris of this story to be cleaned up, I must tell you in simple language the limitations and the rewards and the means that people use to either to attempt to control the region or by their patriotic effort to serve this country what has held this thing back or what has pushed it ahead.

I apologize for so much talking, your Honor, but this is not a little thing that can be discussed in narrow confines of the framework of the fingers of one case.

The Court: Well, is it an expensive proposition?

The Witness: Everything, your Honor, is expensive in this case, but there again, and in respect of vanadium, the expense of producing vanadium, as a metallurgist, a person that has to deal with costs, to pay the payroll, this is my viewpoint, that I have paid the payroll and dug the ore and drilled the rock, the cost of producing vanadium is a function of how much you've got, how cheaply—how big the deposits are, how accessible they are to roads, and what profits you have [95] between the miner who is digging the ore out of the ground and the steel boys that use it in the final analysis, and that gets into one of the funda-

mental relationships of this whole business of the Colorado Plateau.

The Court: Now, is it-

The Witness: It's not expensive.

The Court: Is it in the nature of a gamble?

The Witness: It is not in the nature of a gamble, your Honor. It has never been in the nature of a gamble. It has never been in the nature of a gamble wherever competent business, good judgment on marketing and the reasonable amount of initiative and energy was used in developing the process. Now, in my experience, vanadium in this area, in the Colorado Plateau, could be produced cheaper than anywhere in the world. At the present time this area is producing ninety some per cent of all the world's production of vanadium, and the cost of producing vanadium, if there is one profit between the man that digs it out and mills it and the man that uses it for steel, or so on, it could be produced quite cheaply.

Now, this is the conflict, your Honor, a policy that has dogged this region ever since. In between the miner and the man that uses it, the steel plant, are middle men. Now, if the middle man, which might be the ferro alloy business, happens to own the mines, that's just a happenchance; but if the middle man, who happens to be the ferro alloy business, [96] exacts a profit on top of what the miner asks to have to pay for his expenses of drilling and blasting the ore, and the two were piled one on top of the other, granted the mate-

rial becomes expensive. But throughout the development of the alloy field, and this is abundantly clear to those of us who have lived this thing as part of our business, the whole story of what cost alloys are is what volume you can make, how you can serve the end user and how much you can produce at that volume, and the answer is purely research.

Now, in the particular case of the vanadium— The Court: Just a moment. What was your question? Your first question? I am afraid that we are getting into outer space here just a little.

- Q. (By Mr. Alioto): Well, let me ask you now, Mr. Burwell, specifically, what was the economic situation on the Colorado Plateau in 1938 and 1939?
- A. Thank you. I will try to answer that more closely.

Mr. Holland: What do you mean by "the economic situation"? I think you ought to specify a little more what your—

- Q. (By Mr. Alioto): Just tell us as you saw it as an officer of one of these defendant companies or as an employee of one of these defendant companies, what was the situation with respect to the Colorado Plateau in '38.
- A. I will answer that by inventorying the situation in [97] mid-'38 as what existed, what was being produced, what the market was and what the cost was in mid-'38. I—we—I will now speak in this tense—that I was then operating—an officer of the Carbide—operating these plants. In mid-'38

we had just finished doubling the plant—the capacity of one of our plants that took the ore from the ground and put it into fused oxide or material for the alloy boys, and that doubling of that plant was at the request of the corporation, the Vanadium Corporation of America, to do so. The Vanadium Corporation of America—

Mr. Holland: I object to this. He is trying indirectly to go into the whole picture prior to 1938.

The Witness: This is '38.

Mr. Alioto: If your Honor please, he is talking about 1938.

The Court: What is this company that you are talking about?

The Witness: The United States Vanadium Corporation. At this time we had just finished, in mid'38, doubling our plant at Uravan to deliver vanadium oxide.

The Court: What was the cost of that plant, do you remember?

The Witness: That plant was about a milliontwo or three hundred thousand dollars—I don't remember exactly the figures. But we had increased that plant for the purpose [98] of supplying additional vanadium to the Vanadium Corporation of America, another defendant in this suit.

Mr. Holland: Your Honor, that question of whether they were supplying it for the Vanadium Corporation of America goes into the early history of this case and will require us to go back to 1933.

Mr. Alioto: He is speaking of 1938.

Mr. Holland: You didn't ask this question.

Mr. Alioto: We are speaking of '38.

The Court: Do you know who the purchaser of your product was in 1938?

The Witness: Yes, your Honor. Yes, your Honor. I had built the plant in '38 for the purpose of supplying the Vanadium Corporation at that time.

The Court: All right.

The Witness: It doesn't go back a time. The steel that was used to double the plant in mid-'38 was supplied by the Vanadium Corporation of America. By '38 we had started to produce approximately a million and a half pounds of vanadium oxide, but sales demands were running—were decreasing rapidly, and the supply of—the orders coming in for the vanadium in '39—I will go from '38. We had finished the plant, a plant to do a certain job for both companies. By '39 the plant was finished. But the object of the plant, in '39 we were not able to sell—to turn the vanadium completely [99] over to the Vanadium Corporation of America, we had a million some thousand pounds on hand at that particular time unsold.

The Court: Could you sell it then to anybody else?

The Witness: We tried to, your Honor, and in order to sell it, because we were facing the laying off of several—oh, four or five hundred employees and people who were working—at that time we made a study of the situation about the sales of vanadium and why we couldn't sell it. Now, our

cost at that time in producing vanadium in Uravan was approximately 40 or 45 cents a pound. Our contracts, agreements, in '38 to sell to the Vanadium Corporation of America were 80 cents a pound. We had 40 cents a pound to the good if they would take what they were supposed to take. The plant was built to take 750,000 pounds a year -those were my instructions that I got as the builder of the plant—of vanadium oxide for the Vanadium Corporation. The price that we would get in order to make ferro-vanadium and sell it through the Electro Metallurgical Company, again at a profit to the Electro Metallurgical Company, was \$1.10. So between our 40 cents cost and the \$1.10 that we could sell it through our—the marketing—the man that was hired to sell the vanadium for the Carbide Corporation, was the difference between 40 cents and \$1.10, which was approximately 70 cents a pound, and that is almost twice as much as it costs us to get it out. Now, obviously vanadium was selling cheap-it's not a difficult thing to produce—

The Court: Just there now. You had this supply, this extra supply of vanadium on hand?

The Witness: That's right.

The Court: Could you sell that to anybody you wanted to?

The Witness: We could if we made the price attractive. It was no question that if you want to sell vanadium or you wanted to sell potatoes, that you could sell it if you made a price attrac-

tive enough to the people to buy it. You would say, "Here, I will sell you vanadium at a price that will enable you to use more of it or enable you to buy it from me," and that's competitive pricing.

The Court: Well, did you have any applications for the purchase of vanadium at that time which you refused?

The Witness: No, no, we felt that the price of vanadium was unduly high in view of its cost, your Honor, and we had a million and a half pounds of vanadium on hand which we couldn't sell but which we could sell if we would reduce the price, and therefore we held a conference about that time to see what we could do to preserve our operation.

Mr. Holland: May I ask who you mean by "we"?

Q. (By Mr. Alioto): Who held the conference?

there were many conferences, and they went on for the period of six months, [101], principally between Mr. J. R. Van Fleet, the president of our company, Mr. Pat Gormley, who was I think president of Electro Metallurgical Company at that time; I believe other members of the Electro Metallurgical Company were in the various discussions, and I think Mr. Sneath was consulted in regard to this matter—and particularly Mr. Sneath. Mr. Sneath, who has a very broad experience in the ferro alloy business, represented what we call the European group of Carbide. They had access to sales in Europe for vanadium. And so we appealed to Mr. Sneath at a meeting in '39, I believe, for

help in disposing of this surplus property in Europe or some place. We couldn't-we endeavored to reduce the price to make our product more in demand in the United States, but we were denied that remedy at that time. We were operating under a split policy setup with Union Carbide, On one hand, the policies of sales in the United States were administered by the Electro Metallurgical Sales Company, with the exception of intermediate products which I personally sold or some of our other officials. [102] But so far as the vanadium oxide and ferro-vanadium went, we couldn't prevail upon the Electro Metallurgical Company to reduce the price to one quite in reasonable relationship to our cost. In going ahead with the inventory in 193\_\_\_4

The Court: What did you do with that inventory that you had on hand?

The Witness: We sold a million to Mr. Sneath, whom we appealed to if we couldn't do something about reducing the price in this country. We appealed to Mr. Sneath for relief, and he negotiated a sale through the foreign department, which was closely allied to the cartel group, for a million and a quarter or a million pounds of vanadium oxide, which was shipped to the New York harbor, rebarreled, sent to England and distributed into Germany.

Mr. Archer: Your Honor, I move to strike as a conclusion his statement that the foreign department was closely allied with a cartel.

The Court: What do you mean by the "foreign department"?

The Witness: The foreign department of Union Carbide and Carbon Corporation, which has, as Mr. Holland just mentioned, all these businesses in Europe, even by American companies, was dealt with through so-called cartels.

- Q. (By the Court): What do you mean by a "cartel"?
- A. A cartel is an agreement among producers or vendors of [103] metals or material to sell as a unit and on a fixed price and a certain allocation of the sale, and that is the way most of the alloy business in Europe has been handled and is being handled at this time. In this country, of course, the cartel has been thrown out by our anti-trust laws, but it is the customary, accepted way of doing business, and every company——
- Q. In your judgment was there anything irregular in handling it that way?
- A. No, your Honor, there was not. We were endeavoring to sell our vanadium. There wasn't anything irregular about selling a million and a quarter pounds through the cartel in Europe, no. If they paid us \$1.30, and we got \$1.40 a pound, and we paid Sir Edwin Davies a 10 cents a pound commission, it was good business and we were glad to get it, but the point at issue is this, that it was only a temporary respite and we had 90 per cent of the available vanadium for the future, accessible vanadium in a great empire, and we had men

and homes and people to work, and our problem was to set up a permanent relationship for the future and not depend upon emergency sales from time to time.

Therefore, while we were glad to have the help that Bill Sneath gave us in this particular thing, we knew that it only postponed an evil day of reckoning. I mean some day when we had to roll up our sleeves and get a market of our own in the United States we could do it and keep our people working. [104] And we were well aware at that time we were restricted in our sales in this country.

Q. (By Mr. Alioto): By whom?

Mr. Archer: I object to the question, your Honor, as calling for the conclusion of the witness.

The Court: If you know, now, of your own knowledge.

A. As the producer and executive in charge of producing materials from the mine it was part of my duties, your Honor, to know what the marketing conditions were and where it went, and under what condition, what setup, and over the period of time prior to 1938 which limits me to some extent to answer your question, I, to my satisfaction, to the best of my knowledge, knew that there was an agreement between the Vanadium Corporation of America and the United States Electro Metallurgical Company which restricted—

Mr. Holland: Just a minute.

I object to any period prior to 1938.

The Court: The objection will be sustained.

What you know you might testify.

The Witness: I am sorry.

Q. (By the Court): Were you present at the time that agreement was made?

A. Your Honor, this was not an agreement of the type where everybody got around a table and made signed articles. [105]

Q. Were you present?

A. No, I was not present. It wasn't any one particular meeting. But to my knowledge—

The Court: The objection is sustained.

Your statement will be a conclusion.

Q. (By Mr. Alioto): Did you have a meeting in 1938 with Mr. Gormley and Mr. Van Fleet at Uravan?

A. Yes, we did.

Q. Who were Mr. Gormley and Mr. Van Fleet!

A. Mr. Van Fleet was the vice-president of the U. S. Vanadium Corporation at that time, and Mr. Gormley, I believe, was vice-president of the Electro Metallurgical Company.

Q. (By the Court): What would be the purpose now in producing large quantities of this vanadium if you could not sell it?

A. The reason for producing large quantities of vanadium, we produced it in anticipation of selling it, according to our market analysis, and what we believed it could be sold at the price, just like a farmer, when he grows a lot of wheat, he looks ahead next year—

Q. Why didn't you sell it at that time?

- A. We couldn't sell it, your Honor, because we couldn't cut the price to a point where we could sell it in the United States. [106]
- Q. (By Mr. Alioto): Why couldn't you cut the price?
- A. We couldn't cut the price because the Metallurgical Company wouldn't let us.
- Q. Why did they say they wouldn't let you? What reason did they assign?
- Mr. Archer: I object to that, your Honor. I think we ought to have some foundation as to time and place of any conversation. Otherwise it seems to be clearly hearsay.

The Witness: Your Honor, over a period of 20 years I served the Union Carbide Company and part of my duties, of course, was the question of marketing a product of our mines. It was essential. Now, there was no one meeting, no one person. It was the ordinary course of business. There were maybe a hundred meetings that took place, when I went to New York and would discuss these things upstairs with Mr. Gormley, and we would get together in various groups and discuss our marketing problems and what we were going to do in the way of research to develop more markets and what we were going to do to sell our vanadium and new products to get it on the market at a lower price.

- Q. (By the Court): What was the price now at which you were permitted to sell it?
- A. The price of the ferro-vanadium at that time, to my [107] best knowledge, was running some-

where around \$3.00 to \$3.10 a pound, \$2.90 to \$3.20, depending upon grade, the pounds of vanadium content in the ferro alloy, and we believed we could sell vanadium at a price of \$2.50 a pound, vanadium ferro alloy, and make the same profit on our mining venture, keep our people working and move our vanadium that we had in great abundance, because we had to produce it in abundance to make it cheaply. We could move it in great abundance at \$2.50 a pound, and detailed studies of the metallurgy and the cost and the prices of the reduction, and those things, were made, and I helped make them, as I say, and I was in at the meetings when they were made.

- Q. What price were you permitted to sell it at?
- A. The price we were permitted to sell it at was \$3.00 to \$3.20 a pound, but at the same time we were selling the raw material at a price of 30 cents a pound under the open market to the Vanadium Corporation of America, and they were rather concerned at that time about the market situation. I think Mr. Holland—
- Q. You made a contract to sell them at that price?
- A. That is correct, and I think that is in the exhibits, and I remember the case.
- Q. You thought then that was a pretty good price, didn't you?
- A. No. Eighty cents a pound was a good price to us. [108]
  - Q. Yes.

A. If we could sell the ferro-vanadium that would result from 80 cents a pound at \$2.50 a pound, the vanadium in the final product, that is what we received for it, but if we sold at 80 cents a pound to a second hand, another person, who in turn sold it for \$3.10 and pocketed 30 cents a pound more profit just because he was there, why, the vanadium still was not priced at a point that would stimulate consumption or add a market.

Now, in the case of vanadium, I think it is very essential to know that the usages of vanadium have been clearly determined to be — at least I am satisfied, as a professional metallurgist—at function of price.

The great rival of vanadium is molybdenum. They did the same thing in many fields. And therefore it was a conflict between vanadium and molybdenum as to price, as to who would get the great and growing market in engineering steels.

Now, the great producer of molybdenum was the Climax Molybdenum Company, and their first operations were constricted and non-profitable because they couldn't mine enough, and they had to put their molybdenum into the ferro alloy industry and make ferro-molybdenum, and then they went into steel, and the engineering of steel consumption was all vanadium, it had a great future, because this was the dawn of all the alloy steel period. Molybdenum, however, — Climax Molybdenum revolted [109] against the payment of toll or high profits to the ferro alloy business, and in this case he went

to the Electro Metallurgical Company and started a method-

Mr. Archer: Your Honor, I object to that as calling for a conclusion.

The Witness: It is not.

Mr. Archer: I do not know what he means by paying toll or profits, but if he is talking about some kind of agreement—

The Witness: So they went directly, your Honor, to selling their molybdenum into steel with no intervening profits or costs to go into steel, and when they did that molybdenum became cheaper than vanadium. Then molybdenum began to sell 20, 30, 40 million pounds a year, and vanadium, instead of chrome vanadium steel, you saw chrome molybdenum steel coming out, not because molybdenum was better, but simply cheaper.

Q. (By the Court): How did that affect your supply of vanadium?

A. It affected it very clearly this way, your Honor: If we could reduce the price of our vanadium to \$2.50 a pound, and from \$3.00 to \$3.50 in ferro, we could close the gap between molybdenum and vanadium and sell our vanadium in this growing field in alloys. Therefore all we needed to do to unlock the door was to open our minds and our operations, was to [110] reduce the price to make it competitive.

Q. What did you do?

A. We didn't do anything, your Honor. We couldn't do anything.

Q. You could not sell the-

A. We couldn't because there was an agreement between these two companies, to the best of my knowledge.

Mr. Holland: I object, your Honor.

The Witness: That prevented us from reducing the price of the vanadium and ferro-vanadium, and we continued to sell vanadium oxide to the Vanadium Corporation of America. Instead of cutting the price on our huge output to stimulate production in Colorado—

Q. (By the Court): They took all the vanadium that you could make, did they?

A. No, no, no. Their prices, their markets were becoming more and more restricted all the time. I made a study of this as a part of my business.

Q. Why couldn't they?

A. Their markets and uses of vanadium were being constantly lowered because the steel people were constantly using molybdenum.

Q. Just a moment. If they could buy it at 80 cents and there was a market for it at \$2.50, why couldn't they take it all?

A. Because it would cost the difference between 80 cents and \$2.50 to convert it from the oxide into the ferro-vanadium. It was a low profit step. In other words, if you take oxide at 80 cents a pound of oxide, and it takes two pounds of the oxide to make a pound of the metal, you have two times 80, which is \$1.60, that it costs to convert it, and it costs about 50 cents a pound at that time,

or 60 cents a pound, to convert it, so \$2.10,—and it costs something to sell, and it costs something for research. So at \$2.50, buying it at 80 cents, there was a very meager profit, and they could not cut—so the profit at \$3.10 or \$3.00 was quite substantial. But at \$3.00 or \$3.10 they were losing the market that they could get if they went to \$2.50. But if their costs of 80 cents prevented them from reducing it to \$3.00, which was a reasonable price to carry on the good work that V.C.A. was doing, the Vanadium Corporation were obviously estopped from the remedy of expanding markets and expanded usages of this material, and that was the conflict of policy between the operating group, myself as a mining engineer,—

Q. Did you regard that as a difference in business judgment?

A. That is true, your Honor, that is true. It was simply a disagreement of policies within a great company. But that went on. I was a loyal Carbide official, and I had risen up [112] to a fair place in the ranks the hard way. But we would not necessarily agree. We might at one time have executives of the Carbide who would say, "Here, let's go out and cut the price of vanadium and get the market," and if you would let me open the shutter behind 1938 I will tell you about it, but I can't do it. That is the thing we started in this field to do, just this.

However, that is a misfortune, when you amputate this problem by the legs, for here you don't

get the whole story. Therefore, however, this remedy and this procedure by Carbide officials, such as Beno Shea, such as other technical men who had vision and initiative, envisioned using all this abundance for this purpose.

- Q. You regard that as a difference in judgment of men in authority?
  - A. As to the policy.
  - Q. As to the policy?

A. Whether that policy was restrictive, or in restraint of trade, or whether it injured other people who were trying to get into the picture is beside the answer. However, I will continue, though.

As the 1938-1939 inventory goes along—and I will endeavor to answer your questions—1939 came on, and the first anti-trust investigation came into that region. That is when Sherman Arnold first started looking into the mineral [113] industry, and it immediately caused a great deal of self-concern in the great Carbide Company. They had 63 separate companies loose-held, and it was feared that the investigation might spread to other companies and other relationships, and quite rightly so. I hold no brief for some of this anti-trust thing that has gone on. Some of it is right and just and some of it is not. But we fought. We were concerned in 1939 and concerned in 1940.

- Q. What did you do in 1939?
- A. In 1939 we began to lay our plans to proceed alone again and try to cut the price of vanadium to the point that we could market independ-

ent of marketing through another company who was a competitor in the final product. We had started to lay our plans in that connection, and 1941 and 1942 came on, and then the war hit us. And now we had a situation that was entirely different develop. For the first time there was no matter or question of who was your customer. Uncle Sam needed the vanadium, V.C.A. was trying to get all the vanadium they could out of Peru. They were torpedoing ships, and we all threw together on a program, and the Carbide Company was made agents of four metal reserves for vanadium procurement and put in additional plants to meet that emergency need without regard to costs, because the chrome vanadium was needed for turbine plates and things that were absolutely essential. Molybdenum could not answer. [114]

Then there was still another great thing developed. Of course, by this time we knew, as engineers, and all of us knew, and I think even the V.C.A. knew, because they had some smart men in the field, too, that this field was a rich prize, one of the greatest mineral resources of all time for new things in energy and new things in steel. Therefore the control of the future lay in who had the first market place and the first plants to take it on, and a trickle at that time would become a river of money later on.

Q. After the war who controlled the situation?

A. Your Honor, during the war the United States Vanadium Corporation and the Union Car-

bide I think controlled the situation. We had 90 percent of the field.

- Q. What control did the government exercise at that time?
- A. Well, the government exercised two controls. They appointed agents or contractors to produce the vanadium, and the government, speaking in the broad sense, the Army, moved in with regard to the uranium in the ore that came out of the same material.
- Q. What I am getting at is did the government fix the price?
- A. The government fixed the price limit that could be paid for vanadium ore, and the government also, the metal reserves, set a price, I believe, and whoever they distributed this vanadium oxide to, it was open and above board, because [115] all the vanadium was under allocation by the government.
- Q. Who determined the producers, the government or the individual?
- A. I am not too—my recollection is a little bit unclear, but my recollection is that the War Production Board allocated to consumers the vanadium oxide based upon the need and the necessity in the war effort that they would establish, and after the War Production Board allocated the vanadium oxide, then the metal reserve wanted the companies that were directed to so do would deliver that material to the particular applicant.

Q. But that was all done under orders of the government?

A. That was done under the orders of the government.

So in this period between 1942 and 1945 we had no problem, really, of marketing vanadium, but, however, there was one vastly more important matter that was coming up. We also-our company, and I as an individual,—were named as a part of the operations in vanadium, because we had a background back before 1938, to be the top secret contractors for the Manhattan District to procure the uranium for the atomic bomb out of that area, and not only that-to make a world appraisal of where uranium lay throughout the world, and what activities were needed, and in case the atomic energy succeeded, and it was abundantly clear at that time the Colorado Plateau-we spent millions of dollars of government money in [116] surveying the resources of this vanadium-uranium-bearing ore. It was abundantly clear that the security of the country depended upon us having enough uranium from these uranium-bearing ores for the future to-

Q. To get to the point, during this period you mentioned from 1942 on, or 1941, what control did the defendants, the owners of the property, what control did they have over production or price, so far as the government was exercising some control?

A. Up to 1944, your Honor, the owners of the property were free to sell the ore to government

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(Testimony of Blair Burwell.)

purchase stations, and they were free to sell their product on a guaranteed market. There was no matter or question of how much they had. They could always sell it.

- Q. But the price was fixed by the government?
- A. Your Honor, it was fixed within a range, but as vanadium was under allocation, the price was also determined by the government in allocating it.

The Court: At this time we will recess until ten o'clock tomorrow morning.

(Whereupon a recess was taken until Tuesday, June 3, 1958, at 10:00 o'clock a.m.)

June 3, 1958, 10:00 o'clock a.m.

## BLAIR BURWELL

a witness on behalf of the plaintiff, having been previously duly sworn, resumed the stand and testified further as follows:

## Direct Examination—(Continued)

- Q. (By Mr. Alioto): Mr. Burwell, yesterday there was a good deal of conversation about the Colorado Plateau. Will you be good enough to look at that map that I am handing you and state generally for the record what it is?
  - A. That is a map of the Colorado Plateau.
- Q. On this map, Mr. Burwell, you will notice there appear certain designations such as Uravan,

Paradox, Gateway, Slick Rock and Moab. What are those designations?

A. Those are districts or portions of the Colorado Plateau.

Mr. Alioto: We ask, if your Honor please, that this map be marked at this time simply for identification.

The Court: Very well.

(The map referred to was marked Plaintiffs' Exhibit No. 26 for identification.)

The Court: I expect that counsel have examined the map and know what it is?

Mr. Archer: I have not seen it, your Honor, but I presume it is of the Colorado Plateau. [119]

The Court: You may look at it and see if you have any objection.

Mr. Alioto: I am not offering if in evidence, your Honor, but simply at this time ask that it be marked for identification for the pictorial reference.

- Q. Mr. Burwell, in connection with your association with the Union Carbide and Carbon Corporation and its subsidiaries and your service as a director and a vice-president of the United States Vanadium Corporation, did you have an opportunity to know the corporate relationships between Union Carbide, Electro Metallurgical Company, the United States Vanadium Company and others?

  A. Why, yes.
- Q. I will ask you if you will be good enough to look at a chart which we have prepared on this

matter, and would you be good enough to state what, to your knowledge, this chart actually represents, and whether it represents the corporate setup of the Union Carbide and Carbon Corporation? You will note it shows Electro Metallurgical Company is a subsidiary of the Union Carbide; Electro Metallurgical Sales is a subsidiary of Union Carbide; Electro Met of Canada is a subsidiary, and United States Vanadium Corporation, another Electro Met company.

Does that actually represent the corporate setup of the Union Carbide Company?

- A. To what time do you refer? [120]
- Q. Let us say in the period of 1938.
- A. It shows the corporate setup. It changed from time to time.
- Q. 1939, since that is the date to which we are directing our attention at the moment.
- A. I think that is pretty closely the organization.
- Q. Under that we have listed certain men: Mr. W. J. Priestley; Mr. B. O'Shea; Mr. J. R. Van Fleet; Mr. Blair Burwell; Mr. F. H. Haggerson; W. H. Sneath; J. A. Rafferty; and Mr. M. D. Arrouet.

To your knowledge, were those men connected with one or more of the corporations set forth in that chart in 1938?

A. I believe that is correct. I am a little uncertain about Mr. Sneath. I believe he was a vice-president of the Metallurgical Company, but that is the only question I have.

Q. In any event, Mr. Sneath was certainly connected with one of the corporations within the Union Carbide setup?

A. He was connected with the Union Carbide and Carbon complex. I think that is right.

Mr. Alioto: We will ask that this be marked for identification at this time, if your Honor please.

(The chart referred to was thereupon marked Plaintiffs' Exhibit No. 27 for identification.)

Mr. Alioto: I have in mind, if your Honor please, certain letters will be read. This should enable the Jury to [121] identify the connection of the men involved.

Q. Mr. Burwell, simply for purposes of illustration, we had some testimony yesterday about vanadium ore. I hand you a piece of the ore. Will you be good enough to state whether that is generally the type of vanadium ore that is found on the Colorado Plateau, or one of the types?

A. That is typical of the ore of the Colorado Plateau.

Q. What is contained in this ore, Mr. Burwell?

A. Vanadium, uranium and radium.

Q. Vanadium, uranium and radium. What is the yellow streak that appears in the ore?

A. That is a mineral of vanadium and uranium called carnotite.

Q. This is the carnotite ore that some of these letters refer to?

A. That is called carnotite ore.

Q. After the ore has been treated in the mill.

I think you testified that there is a product that comes out that is called red cake. I hand you a bottle that is marked "Vanadium pentoxide."

A. This is a purified red cake which contains very little soil, but practically you would call that a red cake.

The Court: What is that?

A. This is brown oxide, yanadium oxide, and red cake is vanadium oxide, your Honor. Practically I can answer you [122] that is red cake.

Q. The Court and Jury, you know, are not experts on these metallurgical subjects. What is oxide?

A. Oxide is a combination of vanadium and oxygen. Vanadium is a metal in its elemental form, and when it is combined with oxygen, it is vanadium oxide, and this is vanadium oxide. It is not the metal. The metal is what is needed to go into steel. So between the ore, which is the oxide of vanadium, and steel, the metal, you have to take the oxygen away from it, and then it becomes a metal and becomes usable steel.

Mr. Alioto: May we ask, if your Honor please, that the ore itself be marked for identification?

The Court: Very well.

(The sample of ore referred to was thereupon marked Plaintiffs' Exhibit No. 28 for identification.)

Mr. Alioto: The witness in his previous answer referred to this as being vanadium pentoxide of a certain type. May we ask that this be marked now

for identification so the record will be clear at this point.

The Court: Very well, let it be admitted.

(The sample of vanadium pentoxide was thereupon marked Plaintiffs' Exhibit No. 29 for identification.)

- Q. (By Mr. Alioto): I will show you another bottle. Is this more properly [123] red cake?
  - A. That is more properly red cake.
  - Q. A less refined material?
- A. A less refined material. It is less highly refined than the other, but this is more properly red cake.

The Court: Let us define that.

The Witness: Red cake is a miner's or metallurgical term. He calls it red cake. It is vanadium oxide; just because it is red. It is a workingman's term, not a technical term.

Mr. Alioto: We ask that this bottle of red cake be marked for identification, if your Honor please.

(The bottle of red cake referred to was thereupon marked Plaintiffs' Exhibit No. 30 for identifications)

- Q. (By Mr. Alioto): I will show you a bottle containing some black oxide material. Would you be good enough to identify that, sir?
- A. That is fused vanadium oxide, and that is red cake that has been converted from a powder into a fused material ready for the electric furnace of the steel boys or whoever wants to use it.

Q. This is the final product of the mill, is it not, of the Western mills?

A. That is the final product of the mills out West.

Q. This is vanadium oxide of which we speak?

A. That is correct.

Q. (By The Court): Is that liquid or mineral?

A. That is solid.

Mr. Alioto: May we have that marked for identification, and I would like to hand it up to the Court.

(The black oxide sample referred to was thereupon marked Plaintiffs' Exhibit No. 31 for identification.)

The Witness: If your Honor please, you can open the top. You will see it is a crystalline hard material that has been fused and heated in the furnace.

Q. (By Mr. Alioto): That black cake, so called, or rather, the fused oxide, the last exhibit in, is that the material from which the ferro-vanadium is made?

A. That is right.

Q. And what is ferro-vanadium?

A. Ferro-vanadium is a combination of iron and vanadium in varying proportions. It is an iron and vanadium metal. Iron is a metal; vanadium is a metal. Oxygen has been taken away from it.

Q. Without being too technical about the matter, Mr. Burwell, will you just state generally and concisely the methods by which the vanadium oxide is processed into ferro-vanadium?

A. There are two methods. I will tell you one. The most expensive as to plant equipment, the one which was earliest, was the method of using an electric furnace, electrodes. [125] The vanadium oxide or the vanadium ore is put into an electric furnace and the arc is started and a little carbon is added and the material is melted down and the oxide is burned away from it by the carbon under high temperatures, and it becomes ferro-vanadium under the agencies of electric heat.

I think that is the process that was used by the Vanadium Corporation until comparatively recently, and is also used by metallurgical companies to some extent in their work.

The other method, the method that is most widely used to date, is a simpler method in which the vanadium oxide which you see there is simply mixed with ground-up aluminum powder, and the aluminum powder and the ground-up vanadium are put in a pot, and ignited by a simple device, and then it all begins to burn. The aluminum metal tears the oxygen away from the vanadium oxide, and the result of that process is ferro-vanadium.

It is a very inexpensive method to do it, because your heat in the form of aluminum, instead of getting it from a electric arc, is gotten in that way, so it is quite a simple matter to do it.

- Q. (By The Court): This ferro-vanadium is nothing more than uniting iron with vanadium?
  - A. That is correct, your Honor.
  - Q. (By Mr. Alioto): This method you have

called the inexpensive method; is there a shorthand trade name for it?

- A. Aluminum thermic reduction, I believe is the term. [126]
- Q. You say that is the lesser—so far as expense is concerned, it is the less expensive method, is that not true?

  A. Oh, by far.
- Q. From that same ore—I hand you a very solid black substance—would you be good enough to tell us what that is?
- A. That is a uranium metal, and that is part of the atomic fuel to an atomic energy plant. This is the uranium metal that came from that ore, or from any other uranium ore. This is a pure piece of uranium metal. This is the start of the atomic energy.

Mr. Alioto: We ask that this be marked, if your Honor please, as our exhibit next in order for identification.

(The sample of the uranium referred to was thereupon marked Plaintiffs' Exhibit 32 for identification.)

Mr. Alioto: I wonder if I might have those exhibits after the court has viewed them.

The Witness: Could I introduce something there? The sample of the uranium metal is beginning to get somewhat radio-active, and I suggest that that not be kept very long. Return it to me where I can put it in a brief case under protection.

Q. (By Mr. Alioto): All right, we will do that.
A. In other words, it would be rather risky to

handle that by inexperienced hands, and I wouldn't like it to get out of my possession or get into some-body else's hands. [127]

Mr. Alioto: We have not introduced it into evidence for that reason.

The Witness: In fact, I don't like it to be handled too much, if you please.

- Q. (By Mr. Alioto): I have been doing it. I will hand it back to you right now, since I have been doing it.
- A. All right. This builds up its radioactivity. It doesn't have it at the start. It builds up its radioactivity and begins to form plutonium and that is the way they made one of the bombs.
- Q. Mr. Burwell, I have placed this material with the ore, the unrefined red cake, and then the more refined red cake, and finally the black cake, or the used vanadium oxide. During the period of time, say 1938 as the year to begin with, in that period of time was the red oxide sold commercially or was it all processed into the fused oxide?
- A. The great bulk was processed into fused oxide. A very small amount was sold as red oxide.
- Q. For what purpose was the red cake so-called sold?
- A. As a catalyst in the manufacture of sulphuric acid and things of that sort.
- Mr. Alioto: At this time, if your Honor please, the Plaintiff offers in evidence as its exhibit next in order a document about which we have already

had some pre-trial stipulations about genuineness and authenticity, dated [128] September 14, 1938, from Mr. Van Fleet to the witness, Mr. Blair Burwell. It was after the period of time we are discussing.

Mr. Archer: Your Honor, I would like to note an objection for the record that this is a letter from Mr. Van Fleet to Mr. Burwell. Mr. Van Fleet is deceased, and consequently I object on the grounds it is hearsay. It has some speculations of his and is not in the form of an admission or business record.

Mr. Holland: Is this offered only against the Union Carbide?

Mr. Alioto: At the moment it is offered only against the Union Carbide. I might just identify Mr. Van Fleet.

- Q. Would you be good enough to state what position Mr. Van Fleet held in 1938?
- A. Vice-President of the U. S. Vanadium Corporation.
- Q. Was he also a Director of the U. S. Vanadium Corporation at the time?
  - A. I believe so.
- Q. Would you be good enough to say whether with respect to mining he was the principal managing officer of the United States Vanadium Corporation at the time?

  A. That is correct.

The Court: Very well, let it be admitted. [129] Exception allowed.

(The document referred to was thereupon received in evidence and marked Plaintiffs' Exhibit 33.)

Mr. Alioto: Ladies and gentlemen, this is a letter written on September 14th, 1938, from Mr. Van Fleet, Vice-President of the United States Vanadium Company, to Mr. Blair Burwell of the United States Vanadium Corporation in Uravan, Colorado.

Q. Uravan, Colorado, was the place where you had your mill, is that correct, Mr. Burwell?

A. That is correct.

Mr. Alioto: (Reading).

"Dear Blair:

"As I discussed with you the other night on the telephone, it has become very important that we find out accurately and definitely who is producing vanadium ore and where it is going. Along with this, we want to know the quality of the ore shipped so that we can get a line on the pounds of V<sub>2</sub>O<sub>5</sub>. I realize that some of the quality will have to be estimated, but we ought to get a very accurate line on what the shipments have been from southeastern Utah and southwestern Colorado. We may have to do something about this production, and if information could be obtained on what they get for this ore, it would help [130] out. For instance, Harbison told me that he received 42c per pound for V<sub>2</sub>O<sub>5</sub> and 60c per pound for U<sub>3</sub>O<sub>6</sub>."

Q. What is U3O8?

A. That is uranium oxide, uranium metal and oxygen combined. That is the way it was formed in the ore. [131]

"For instance, Harbison told me that he received 42 cents per pound for V<sub>2</sub>O<sub>5</sub> and 60 cents per pound for U<sub>3</sub>O<sub>5</sub> on a low-grade Polar Mesa ore, but if the V<sub>2</sub>O<sub>5</sub> went over seven percent and the U<sub>3</sub>O<sub>5</sub> over two percent he received 45 cents per pound on V<sub>2</sub>O<sub>5</sub> and 80 cents per pound for U<sub>3</sub>O<sub>5</sub>. These are pretty high prices for us, but it may be necessary to finally do something about it.

"I have an idea that this production of ore which is going to Europe and Japan is quite a quantity of  $V_2O_5$ , and more than we think it is. I have been talking about this for some time here in New York, stating that the high prices maintained for  $V_2O_5$  in Europe invite and stimulate this kind of competition and can eventually support a considerable vanadium business, with possibly later on a plant.

"In this respect I have had some correspondence with King"——

Who was King?

- A. W. G. Haldane, my second in command.
- Q. At Uravan?
- A. My assistant to me, that's right.
- Q. He was second in command in 1938?
- A. To me.
- Q. (Continuing reading): "In this respect I have [132] had some correspondence with King about the application made by Balsley and Kipe

for a freight rate on vanadium ore to Castletown, New York, where it is claimed the ore will be reduced. We cannot get any line on this plan here, and at Castletown there is no plant now available for this kind of work.

"I hope you will be able to put somebody on this and make a very careful canvass of the situation. If you could have a talk personally with Balsley you could probably find out all about it. In talking to Balsley it would be to his advantage to give you this information because I have an idea he is not making any too much money out of this business, and it might be made easier for him on some kind of a combination with us if we decided to do something about it, rather than to fight it. We could, of course, run all this business out—but it would not be good policy to hint of this or threaten.

"In this connection I would like to have a line on the Shattuck Chemical Company production. They are selling fused oxide not only in this country, but in Europe. Their oxide is low-grade containing only a little over 50 percent  $V_3O_5$ , but they are selling it for less money. I have an idea their production is only about 25 tons of fused oxide a year, but you [133] may be able to get a closer line on this. From the record you will be able to gather on the shipments to Yitro, we can get a line on their production of  $V_2O_5$ .

"I have a pretty good line on the production of vanadium in Mammoth, Arizona, as it is all sold through a friend of mine here in New York.

"Will you please see what you can do about this for me?

"Very truly yours,

"J. R. Van Fleet."

Now, Mr. Burwell, do you know what he is referring to-what is Mammoth !- "the production of vanadium in Mammoth, Arizona,"-what was that about 9

A. There was a mine and a mill in Mammoth, Arizona, producing molybdenum and vanadium, and that was the mine.

Who was running that mine, if you remember?

A. I am not sure. I believe it was the Mammoth St. Anthony Mining Company. That is my recollection.

Q. Did you or anybody in the United States Vanadium Corporation negotiate for taking over the production of Mammoth St. Anthony?

We negotiated, yes.

Q. Was-

The company negotiated. I ran the test work on the [134] concentrate.

Did you thereafter buy that production? Q.

A. No.

Do you know what happened to that produc-Q. tion?

A. For awhile I believe it went to Germany, and then it went to the Vitro Chemical Company during the war.

Q. Now, prior to the war period in 1942 did any

of the Mammoth production go to the United States?

- A. I believe it did but I am not clear on that.
- Q. Were you the man who personally negotiated for the Mammoth production?
- A. I was only one man that assisted in it. I was not the man.
- Q. Did those negotiations take place shortly after this letter was written, which is September 14th?
- A. I don't recall just when it occurred, but I—my memory isn't clear about that. I don't recall.
- Q. Now, Mr. Burwell, in September of 1938 your company wasn't short of vanadium oxide, was it?
- A. Short? We were facing a shutdown because we had too much vanadium, and I had a lot of employees I was afraid I would have to lay off. We had 1,400,000 pounds at the end of '38 that we hadn't sold.
- Q. If you had so much vanadium that you couldn't sell, were facing a shutdown, why did you try to buy the Arizona [135] production from Mammoth St. Anthony?
  - A. Keep it off the market.
  - Q. Keep it off what market?
  - A. The vanadium market.
  - Q. In the United States?
  - A. That's right.
- Q. Did you at or about that same period try to buy any other independent production?

- A. (No response.)
- Q. How about Vitro?
- A. No, I don't recall any negotiations with Vitro. I don't recall that we ever bought any vanadium from Vitro, or negotiated for it.
- Q. Do you recall any negotiations with anybody else during that 1938-39 period?
  - A. That's 20 years ago.
  - Q. I know, sir.
  - A. I am getting a bit old.
- Q. How old are you, by the way, Mr. Burwell? Do you have any objection to stating it?
  - A. No. I am 63, and I will be 64 this fall.
  - Q. Thank you, sir.

The Court: Just a kid.

Go ahead.

Mr. Alioto: I know that. [136]

- A. There were other negotiations to buy output from different mills. The date—I am not sure they negotiated to buy the vanadium—I think—from the Blanding Mines. The date, again, I am not sure.
  - Q. (By Mr. Alioto): Was it before 1941?
- A. I believe so, but I am not sure, unless I would search the records or search my files.
- Q. Did you personally participate in those negotiations with the Blanding Mines?
  - A. Yes, I did.
- Q. And were you authorized to do so by Mr. Van Fleet or anybody else?
  - A. Oh, certainly.

- Q. Did you acquire the production of the Blanding Mine?
- A. I don't recall that I did. I believe that the production from the Blanding Mines was very small and uncertain, and that the plant failed for lack of technical competency in producing it.
- Q. At the time you were negotiating for the production of the Blanding Mines did you need vanadium oxide?

  A. No.
- Q. What was the purpose of negotiating with them, then, to buy that production?
- A. We were controlling the output of vanadium, keeping it [137] off the market.
  - Q. What market, the United States market?
  - A. The United States market.
- Q. Was it your purpose to keep it out of the hands of independent producers of ferro-vanadium?

Mr. Holland: I suggest that Mr. Alioto be sworn if he is going to testify, your Honor.

The Court: Yes, I think your questions are rather leading and suggestive.

The objection is sustained.

- Q. (By Mr. Alioto): During this period of time when you say you had so much of this—so much vanadium oxide—that you were talking about closing down the plant, did you have a meeting in Uravan with Mr. Gormely and with Mr. Van Fleet!
  - A. Yes, we did.
- Q. Uravan, again, is the location of your mill on the Colorado Plateau; that's correct, is it not?

- A. That's correct.
- Q. Do you recall who else was present at that meeting, if anybody?
- A. There were a number of our staff members there—Mr. Gormely, Mr. Van Fleet, I believe Mr. Haldane was there, Mr. Weston, members of our administrative staff.
- Q. Now, Mr. Gormely was one of the New York executives, [138] was he not?
- A. He was the operating vice-president in charge of Electro Metallurgical Company, as I recall at this time.
- Q. What was said at that conference? Give us the substance of it as best—

Mr. Archer: May we have the date of it?

- Q. (By Mr. Alioto): Could you fix the date any more exactly than the year 1938?
- A. My recollection, it was in the fall of 1938. Mr. Gormely spent a week or ten days visiting all the western mines. We were endeavoring to avoid the snowstorms out in California. So I think it was the fall of '38.
  - Q. You say the snowstorms in California?
  - A. That's right. Up on the High Sierras.
  - Q. O. K. A. It snows up there sometimes.
- Q. It snows down here sometimes; down South sometimes, too.

And then what happened?

A. Our problem was a severe one. We had a million four hundred and some thousand pounds of vanadium oxide in the excess of sales accumu182

(Testimony of Blair Burwell.)

lated in the warehouses at that time, were facing a shutdown. We had, of course, a large organization. We had—my problem—and I presented Mr. Gormely and [139] Mr. Van Fleet—is what to do about our continuing increasing of unsold vanadium stocks. We had just finished the year before an additional capacity to produce 750,000 pounds for the Vanadium Corporation of America. They had not taken that vanadium. I reported at that time that we either faced another shutdown of our organization, disbanding of our people, such as we did in 1932 for the same reason, unless we could do something about selling our vanadium.

Now, I made a study and presented it to Mr. Gormely, Mr. Van Fleet, of the cost of our vanadium at that time, what we could produce ferro-vanadium for, and why couldn't we do something about getting our vanadium sold on the market; that we were in danger again of losing our whole objective of a vanadium business and of vanadium operation on the Colorado Plateau. Our costs at that time—and I remember figures far better than I do names—was just a shade under 35 cents a pound of V<sub>2</sub>O<sub>5</sub>—mining, four dollars some cents a ton; smelting, and with amortization, I think our costs were approximately 39 cents.

If we took the vanadium, I reported, that we were producing at practically 40 cents, and converted it into ferro-vanadium, it would result in the cost of ferro-vanadium of approximately one dollar—let's see—\$1.30 a pound of V. Ferro-vanadium.

I believe, at that time was selling for \$2.60-\$2.70, depending upon whether it was a high purity grade. [140] The difference between \$1.30 and \$2.60 is \$1.30 a pound of V. profit to our venture. Whether it went in the pockets of Electro Metallurgical or whether it went into the pockets of United States Vanadium didn't make much difference. We could easily sell vanadium at \$2.25 a pound and still make approximately 90 cents a pound of V., 45 cents a pound of oxide. That was 100 percent profit. In other words, we had the cheapest vanadium in the world. Why didn't we sell it? Why couldn't we go ahead?

Mr. Gormely reported on their efforts to sell Silvaz. Mr. Gormely had been very sympathetic about our position and our venture and our division, and he had attempted to sell vanadium in another form, which he called Silvaz, which was a cheaper method of putting vanadium into steel, and they made Silvaz and had delivered some to test customers. I had cooperated with him, Mr. Van Fleet had cooperated with Mr. Gormely, Mr. Ernie Doom, Union Carbon Research Corporation, Mr. Bransome, and the rest of the organization, in the project of selling something that wasn't ferro-vanadium, and Mr. Gormely reported as to what had happened with our Silvaz, and he said that the Vanadium Corporation had complained there had been a breach of their understanding, and that they were forced to discontinue the production of Silvaz.

Then I said why-

- Q. Who was forced to discontinue the production of Silvaz? [141 Who?
  - A. The Electro Metallurgical Company.
  - Q. What else did Mr. Gormely say?
  - A. Mr. Gormely said-

Mr. Holland: Just a minute.

If the Court pleases,-

Q. (By Mr. Holland): Is Mr. Gormely still alive?

A. No, unfortunately.

Mr. Holland: Well, we feel, your Honor, that we can't possibly cross-examine on this; that it is a dead man's statement of what someone else told him, made to Mr. Burwell. It is double-hearsay, and we object to the evidence and ask that it be stricken.

Mr. Alioto: If your Honor please, this was the top executive of the Electro Metallurgical Company at the time. Mr. Bransome and Mr. Laub of Vanadium Corporation are still living and are going to be here, so they can contradict that testimony if they want to.

Mr. Holland: He doesn't say who told Mr. Gormely that. He just says Vanadium Corporation did.

Mr. Alioto: But the president-

- Q. (By The Court): Let me understand your statement again, Mr. Witness. Mr. Gormely made the statement to you? [142]
  - A. That's correct.
  - Q. And what did he say?
  - A. He said that they had-that the Vanadium

Corporation had objected to the sale of Silvaz as a means as against the agreement with regard to vanadium sales, and that therefore they had to discontinue the production of this Silvaz.

They said further that the Vanadium Corporation had stated it was simply a subterfuge or device to sell vanadium outside of their agreement.

Q. Who was present at that time?

A. Myself, Mr. Weston, Mr. Haldane, Mr. Van Fleet, and Mr. Gormely.

The Court: Are any of those gentlemen alive?

Mr. Alioto: Mr. Haldane and Mr. Weston are living.

Mr. Holland: Will they be here?

Mr. Alioto: Do you want to bring them here? You can bring them here.

Mr. Holland: I was just asking you.

Mr. Archer: I think Mr. Weston is dead.

The Witness: Mr. Weston died last week.

Mr. Holland: Mr. Weston died last week.

Mr. Alioto: Mr. Haldane is living, if your Honor please.

Mr. Holland: But isn't Mr. Haldane in such bad health that he couldn't come here? [143]

The Witness: I think that's correct. He is 85 years old and he can't move out of the house.

Mr. Holland: Well, there isn't a one of them that is available, then, your Honor.

The Court: The objection will be sustained. Exception allowed. There will be no possible way to cross-examine a witness on those matters—that is,

to produce evidence, if those gentlemen are all dead.

Mr. Alioto: But the problem is this, if your Honor please: This witness is not dead, and he was there, and he was their official.

The Court: The Court ruled.

Mr. Alioto: Yes, if your Honor please. We will have an exception, I take it, on that?

The Court: Exception allowed.

Mr. Alioto: Thank you.

Q. (By Mr. Alioto): What else did Mr. Gormely tell you at that time?

Mr. Archer: May we have the same objection, your Honor, to this conversation with Mr. Gormely?

Mr. Alioto: This is their own vice-president and director on the stand, if your Honor please, so far as Union Carbide is concerned.

The Court: You are assuming that there was something else said. [144]

Q. (By Mr. Alioto): What, if anything else, was said at that time, Mr. Burwell?

A. There was.

Mr. Holland Now, if your Honor please, this-Q. (By The Court): Have you stated the conversation, now, in substance?

A. Your Honor, no. The conversation covered days of discussion. There were problems of this plant—

Mr. Holland: Before he gives the conversa-

Λ. ——there were being things discussed——

Mr. Holland: We would like to object before he gives the conversation. [145]

This is a vital operation. There were many subjects discussed.

Q. (By The Court): Have you stated the substance of the conversation you had?

A. Well, this was a small portion of the conversation. They all related to the same matter.

Q. Let me ask you this question: At the time you had these conferences, when you had this extra supply of vanadium on hand, was there a market for vanadium?

A. We believe so. It was being sold.

Q. Who were the purchasers of vanadium at that time?

A. Your Honor, you mean vanadium in steel?

Q. Yes.

A. Well, nearly all the steel companies that made alloy steel—the Crucible Steel Company, First Sterling—there are probably a dozen companies or more that were producing vanadium in steel.

Q. The steel companies that were purchasing, were they your customers?

A. They were customers who buy ferro-vanadium, yes.

Q. Was there any market for that particular material other than the steel mills? A. No.

Q. Was anybody else interested in this then except your company and the steel mills so far as the sales were concerned? [146]

A. Vanadium Corporation of America. Those

were also selling competitively to the steel people. In other words, there were two people selling to the steel industry, both selling the same product, both for the same purpose, and to maybe 50 customers.

Vanadium is widely used, your Honor. It is used in every variety of engineering steels, so there is hardly a steel company that does not buy vanadium in one form or another. The Vanadium Corporation of America was selling ferro-vanadium the Metallurgical Company was selling ferro-vanadium to the steel people, and there was a market. But our problem was that much of our vanadium was going to the Vanadium Corporation of America, who in turn made ferro-vanadium and they were selling ferro-vanadium in competition with Electro Metallurgical Company to the steel people. But we were in the dual position of selling our raw material to our competitors supposedly to the steel people. Therefore the situation, your Honor. That is the essence of the whole thing.

- Q. Was there a demand by the steel mills for the ferro-vanadium?
- A. Yes, there was a demand. Vanadium is one of the most essential, necessary elements of steel. There is always a market.
- Q. Why didn't you, if the steel mills wanted it, if they were demanding it and you had a supply, why didn't you sell it? [147]
- A. That is why I was asking the question, your Honor. I was the operator of the mines. I had peo-

ple to employ. I was asking, "Why don't we sell it to our customers, the steel people?" The steel people, too, were just like any other purchaser of alloy materials. They could use vanadium, needed vanadium for essential things, but they could also purchase molybdenum, too. They could buy other things—chromium—they bought other alloys. Therefore if we could present vanadium to them at a little cheaper price, we knew, and there was a report prepared, that we could use it.

Q. The substance of your conversation in this conference, then, was that these other parties did not want to reduce the price any, is that it?

A. That is correct, and the survival of our particular company, and my particular job depended upon moving this particular vanadium into the steel people.

Q. What did you finally do about it?

A. Nothing.

Q. Did you close the mine?

A. No. Soon after that, your Honor, we had the start of World War II. That saved our bacon. Pardon me for my expression, but soon after that, 1939 and 1940, the demand for vanadium especially began to come from Europe. The armaments prior to World War II started, and immediately there was a flow of vanadium. [148]

In 1939 we sold a million and a quarter pounds just for that purpose, starting a war.

Q. You did not sell what you had on hand?

- A. No, we didn't until 1939, when we had to move some of it into Europe for war purposes.
- Q. How soon after 1938 was it that you disposed of the supply that you had on hand?
  - A. It was-
  - Q. Approximately.
  - A. I think probably a year or two years.
  - Q. 1939 and 1940?
- A. 1939 and 1940 we began to dispose of our product.
  - Q. And you did dispose of it?
- A. That is right, we moved a lot of it down into the Americas, into the steel mills, but we moved it into Europe where the preparation for World War II was going on. It started, and the use of vanadium in war was just doubled. They used ten times as much vanadium when war came along—
- Q. In 1939 and 1940, you had no trouble in disposing of your product?
- A. I believe that is essentially correct, your Honor. I would have to check it, but from 1940 or 1941, there was no problem in disposing of our vanadium, no.
- Q. Let me ask you this: At that time your customers were only the steel mills? [149]
  - A. That is right, essentially so.
- Q. (By Mr. Alioto): Mr. Burwell, when you told Mr. Gormely, "Why don't we reduce the price to sell the vanadium in 1938," what did he say?

Mr. Holland: Your Honor, I object. That is the

The Court: It is repetition. He said that they objected. They did not want to sell it at that price.

Mr. Alioto: If your Honor please, there was a lot more to this conversation.

The Court: I know. You can have this conversation extended over weeks, but we are not going to do it. He has covered the situation now. Let us go to something else.

Mr. Alioto: I want to be deferential about this matter, if your Honor please, but may I indicate to the Court, privately or otherwise, what the rest of the conversation was? It is a matter of testimony in other proceedings and it is very important to the plaintiff.

The Court: I prefer that the witness testify. You can state whether there was anything else now, other than what you have related.

The Witness: Yes. We discussed the matter of reducing the price of vanadium—

Mr. Holland: I object, your Honor, to his stating what it was. We have an objection as to this conversation on [150] the ground we can't cross-examine on it.

Mr. Alioto: I submit, if your Honor please, it is a matter of cross-examination. There are two living witnesses to this conversation, and this is a corporate matter, and I do not think the rule with respect to dead persons applies to corporate agents.

Furthermore, they have their top executives at the time, Mr. Bransome and Mr. Laub, here in San Francisco right now.

Mr. Holland: They will be here, but he doesn't say who said it.

Q. (By the Court): Will you state who made the statement in your further testimony? Don't say "they," but mention the one who made the statement.

A. Mr. Gormely made most, made the statement with regard to Silvaz and he made the statements with regard to the MacQuaig report—

Mr. Holland: I object, your Honor, to his stating—you asked who made the statement and he is trying to get the statement into the record.

Mr. Alioto: Your Honor has in mind that these are the top executive officers of these companies.

The Court: The objection is sustained, subject to change if the circumstances justify it. I do not know how they could cross-examine the witness or how they could [151] produce other witnesses here if they are all dead.

Mr. Alioto: The witnesses are not dead who were parties to this arrangement, if there was an arrangement.

The Court: Who are the others?

Mr. Alioto: Mr. Bransome, Mr. Kett, Mr. Laub and Mr. Gibbons, the four top personnel of the Vanadium Corporation of America, and they are all living, every one of them. Mr. Burwell is here. He can be cross-examined. He was a director of this company.

The Court: Go ahead and let us not have any repetition. Overruled, Exception allowed.

Q. (By Mr. Alioto): What was said by Mr. Gormely when you said that—when you asked him about reducing the price?

Mr. Holland: That is what we object to, your Honor, and your Honor has ruled.

The Court: That is repetition.

Mr. Alioto: No, I do not believe he has completed the conversation, if your Honor please.

Q. Don't tell us what you have already said.

A. I answered that question. I think I answered that question.

Q. Was anything said about other alloys at that time?

The Court: Well, now, just a moment. Let him state what was said, but don't suggest to him the substance of [152] his answer.

A. The conversation, of course, covered a lot. I was taking in the conversation and I said, "Why didn't we go ahead and cut the price of vanadium?" I believed that the Vanadium Corporation of America could not produce vanadium at a price of \$2.25 a pound and survive.

Mr. Gormely said that would put the Vanadium Corporation out of business.

I said, "All right, suppose you do put them out of business. What is the difference? We have people down here working—the survival of our business or the survival of the Vanadium Corporation business?" I said, "Where do our loyalties lie? Why don't we put the Vanadium Corporation out of business?" That is clear words.

He said, "If we put the Vanadium Corporation out of business, we would lose our control competitor in ferro-chrome."

That, your Honor, is the cold words. There is nothing wrong about that.

Q. Was anything said about the MacQuaig report at that time?

Mr. Archer: I object, your Honor.

The Court: Sustained.

Mr. Holland: That was a 1935 matter.

Mr. Alioto: I am talking about what was said in 1938. [153]

The Court: Don't put the words in the witness' mouth. Let him testify to what was said there.

Q. (By Mr. Alioto): What else was said there? The Court: Don't lead the witness.

Q. (By Mr. Alioto): What else was said there?

A. We discussed the MacQuaig report. I discussed the MacQuaig report. I collaborated in the MacQuaig report. I wrote a portion of the MacQuaig report. I asked them about the MacQuaig report.

Mr. Holland: Your Honor, this is all matters going back to 1935.

Q. (By the Court): When was that?

A. The MacQuaig report was 1935, your Honor. It pertained to the problem we were discussing in 1938.

Q. (By Mr. Alioto): Did you discuss this report in 1938 at Uravan with Gormely and Van Fleet?

A. That is correct.

Q. What was said about it?

Mr. Holland: We object, your Honor.

The Court: The objection is sustained. It has reference to something that occurred in-1935.

Mr. Alioto: Your Honor, the conversation did not occur in 1935.

The Court: I understand it didn't, but he has stated the substance of the conversation. [154]

Mr. Alioto: No, he has not, if your Honor please. He hasn't at all.

The Court: Go ahead and answer the question. Let us see what it is.

Q. (By Mr. Alioto): What was said about the MacQuaig report? A. The MacQuaig—

Mr. Holland: Your Honor, we object-

The Court: Don't state the substance of the MacQuaig report. Just state what was said there.

A. Gormely said we could not follow the recommendations of the MacQuaig report because the sales department would not allow them to do it, wouldn't allow them to cut the price of vanadium, and for the same reason he said we couldn't go ahead and sell Silvaz because we would destroy the Vanadium Corporation as a company, and their competitive value in ferro-chrome would be lost, or else some of the steel companies would pick them up, and the company then, the Vanadium Corporation of America, would be a captive company, making the other alloys, and they would lose their own business in ferro-alloys. It was too great, a risk to

run to destroy the Vanadium Corporation of America.

Q. (By Mr. Alioto): Did you in September of 1938 understand what Mr. Gormely meant by their value in ferro-chrome?

Mr. Archer: I object, your Honor. [155]

The Court: Sustained.

Q. (By Mr. Alioto): In 1938 did Mr. Gormely tell you—

The Court: Now, just a minute. Don't lead the witness.

Mr. Alioto: All right, if your Honor please.

Q. State whether or not Mr. Gormely—just say yes or no, please—explained to you in 1938 in Uravan what the relations were between V.C.A. and Union Carbide on ferro-chrome?

A. Yes, he did.

Q. What did he say? Just tell us what he said and nothing else and what you said.

Mr. Archer: Your Honor, I object to this. This is clearly irrelevant. This is a vanadium case, possibly a uranium case, but certainly not a ferro-chrome case.

Mr. Alioto: I submit, if your Honor please, the witness has already testified.

The Court: Let us see now. What did this refer to?

The Witness: I am getting a bit confused now about some of this give and take.

The Court: Restate your question.

(Question read.)

- A. Yes, he told me.
- Q. What did he tell you?
- A. He told me that the Vanadium Corporation of America had been established as a friendly competitor to sell low [156] carbon ferro-chrome in the United States, and the reason for that was to forestall anti-trust action that might come up in the future. That was on the advice of their attorneys at that time.

Mr. Alioto: We offer in evidence as our exhibit next in order a letter of September 19th, 1938, at or about the same time from Mr. Van Fleet to Mr. Gormely, Mr. Swain and Mr. Sneath.

- Q. First of all, Mr. Burwell, will you be good enough to identify Mr. Swain and Mr. Sneath?
- A. Mr. Swain, I believe, was an official of the Electro Metallurgical Sales Corporation, and Mr. Sneath—I have already testified to that.
- Q. Was Mr. Swain an important official of that company?
- A. Yes, I think he was a vice-president of the sales organization.

Mr. Alioto: We will offer this in evidence, if your Honor please.

Mr. Archer: May I have the same objection that I had to the previous exhibit?

Mr. Holland: May I see what it is?

Mr. Alioto: I thought I had left it on the desk, Mr. Holland. I am sorry.

Mr. Hölland: I take it this is not offered against the Vanadium Corporation? [157]

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Mr. Alioto: At the present time it is offered against Union Carbide.

Mr. Archer: This is again by Mr. Van Fleet, who is dead, and Mr. Gormely.

The Court: I don't understand.

Mr. Archer: I am objecting on the ground of hearsay. This is by Mr. Van Fleet, who is dead, and Mr. Gormely, who is dead.

Mr. Alioto: And Mr. Swain and Mr. Sneath are dead?

Mr. Archer: No, they are not.

Mr. Alioto: We will offer it.

(The document referred to was thereupon received in evidence and marked Plaintiffs' Exhibit No. 34.)

The Court: Just a moment, now. The Court has not ruled on that at all. This is a letter from whom to whom?

Mr. Alioto: Mr. Van Fleet to Mr. Gormely entitled "Competitive Vanadium Ore Production September, 1938."

The Court: How are you identifying that?

Mr. Alioto: This document we have already had pre-trial stipulations with respect to genuineness and authenticity.

Mr. Archer: No objection on the ground of authenticity.

The Court: Very well. It will be admitted. [158] Mr. Alioto: This letter is dated September 19th, 1938 from Mr. Van Fleet to Mr. Gormely, Mr.

Swain and Mr. Sneath. It is entitled "Competitive Vanadium Ore Production," and it is from New York City.

The Court: Just a moment before you start on that. We will take a ten-minute recess.

(Recess.) [159]

Mr. Alioto: Ladies and gentlemen, at the recess I started to read the letter which is dated September 19, 1938. It is written by Mr. Van Fleet to Mr. Gormely, to Mr. Swain, to Mr. Sneath, and the subject matter title is "Competitive Vanadium Ore Production" (reading):

"Dear Mr. Gormely:

"A preliminary investigation of the vanadium ore production in southeastern Utah and southwestern Colorado has been made. The investigation is being continued and will be made complete at a later date. Preliminary figures indicate that the  $V_2O_5$  content of the ore which has been shipped already this year up to September 1st amounts to approximately 225,100 pounds. It is thought that for the balance of this year production will be at about the same rate, and the total ore production will amount to approximately 338,000 pounds contained  $V_2O_5$ .

"The preliminary report does not give exports to Europe, but seven cars containing 34,000 pounds V<sub>2</sub>O<sub>5</sub> have been shipped to Japan already this year. An approximate list of those shipments-to September 1, 1938, follows:

"Japan ...... 7 cars 34,000 lbs. V<sub>2</sub>O<sub>5</sub>

"Vitro Mfg. Co. . . . . 29 cars 125,500 lbs. V:Os

"Shattuck Chemical

Co. . . . . . . 2 ears 5,800 lbs. V<sub>2</sub>O<sub>5</sub>

"North Continent Min-

ing Co. (Produced) 40,000 lbs. V<sub>2</sub>O<sub>5</sub>

"Miscellaneous ...... 20,000 lbs. V2Os

"225,100 lbs. V2O3

"The seven cars of ore which were sent to Japan were produced from the Temple Mountain, Yellow Cat and Polar Mesa properties in southeastern Utah. A Japanese outfit started to build a mill at Temple Mountain to concentrate ore from the many dumps. They worked about 60 days, apparently ran out of money and left the property—leaving unpaid bills. The ore shipped from Yellow Cat and Polar Mesa was purchased from the operators of those properties.

"The Vitro Manufacturing Company has purchased 29 cars containing 125,500 pounds V<sub>2</sub>O<sub>5</sub>. This ore also contains better than two percent U3O8."——

Incidentally, Vitro is one of the ceramic manufacturers in the United States?

The Witness: That's correct. They made colors out of vanadium.

Q. (By Mr. Alioto): It is one of the large American companies, is it not?

A. (Witness nods head affirmatively.)

Mr. Alioto (continuing reading): The Vitro Manufacturing Company has purchased 29 cars containing 125,500 pounds V<sub>2</sub>O<sub>5</sub>. This ore also con-

tains [161] better than two percent U3O8. The Vitro Manufacturing Company process this ore for the uranium and sell the vanadium residue in some convenient form, recently reported as being fused oxide. It is not known at present where this vanadium goes. About half of these 29 cars have been produced at Polar Mesa by Harbison and Kipe. They receive high prices for this ore, namely, 45 cents per pound of V<sub>2</sub>O<sub>5</sub> and 80 cents per pound of U3O8 contained in the ore. Vitro pays the freight from Utah.

"The Shattuck Chemical Company of Denver has purchased two cars of rather low-grade ore containing 5,600 pounds of  $V_2O_5$ . These two cars were specially selected uranium ore and contained higher uranium in proportion to  $V_2O_5$  than most shipments.

"The North Continent Mining Company has a small plant in the Paradox Valley and has produced about 40,000 pounds"——

Q. (By Mr. Alioto): Now, the Paradox Valley directly adjoined Urayan, did it not?

A. Yes. But that statement isn't quite correct. The plant was not in Paradox Valley, but forty miles south of Paradox Valley.

Q. Forty miles south? [162]

A. (Witness nods head affirmatively.)

Mr. Alioto (continuing reading): "The North Continent Mining Company has a small plant in the Paradox Valley and has produced about 40,000 pounds of  $V_2O_5$  so far this year. This production is

sent to the Shattuck Chemical Company in Denver. This production of the North Continent Mining Company purchased by Shattuck rather checks previous information that Shattuck Chemical Company produces and markets between 50,000 and 75,000 pounds of V<sub>2</sub>O<sub>5</sub> yearly. They put this in the form of fused vanadium oxide with varying degrees of purity and containing from 51 to 75 percent V<sub>2</sub>O<sub>5</sub>.

"There has been an estimated miscellaneous production of approximately 20,000 pounds V<sub>2</sub>O<sub>5</sub> from various sources.

"If the production for the rest of 1938 is in proportion, the entire 1938 production will amount to approximately 338,000 pounds contained  $V_2O_5$  from these ore sources.

"The Mammoth Mine in Arizona has an appreciable production of vanadium. Several years ago the Molybdenum Corporation of America built a mill at Mammoth with which to process ores extracted from the New Year and Mohawk properties. They entered [163] into a contract with the owners of the Mammoth mine adjoining, to also treat ores from that mine. The treatment and recoveries were not satisfactory to Mammoth. Consequently, about January 1, 1938, Mammoth purchased the mill from the Molybdenum Corporation and took over the milling operation. Concentrates are made in this mill containing gold, lead, molybdenum and vanadium. The concentrates contain percent V2Os and seven percent about five M.O."-

Q. (By Mr. Alioto): "MoOs." What is that?

A. M<sub>0</sub>O<sub>3</sub>, molybdic oxide.

Mr. Alioto (continuing reading): "We have looked over this operation, obtained samples of concentrates and are able to check up fairly well the production. The present capacity of the Mammoth mill would yield approximately 100,000 pounds V<sub>2</sub>O<sub>5</sub> yearly, which checks closely with the 1937 production amounting to 90,000 pounds V<sub>2</sub>O<sub>5</sub> purchased by Associated Metals and Minerals Company.

"The Mammoth mine is owned by Lloyd-Smith, owner of Time, Life and Fortune magazines, and it is incorporated under the name of Mammoth Saint Anthony Company. Foster Naething is the general manager of [164] this company and is a very competent mining engineer.

"If we add this 100,000 pounds  $V_2O_5$  to the competitive ore production listed above, the total competitive production for 1938 will be approximately 438,000 pounds  $V_2O_5$ . There are many attractive occurrences of carnotite ore in the Southwest, and the production could easily be twice as much—given adequate financing and management.

"One potential producer of  $V_2O_3$  is the Anaconda Copper Company. In Idaho they produce phosphate rock, moving it to Anaconda, Montana, for processing into fertilizer and phosphoric acid. The plant for this purpose at Anaconda is in connection with the smelter where they obtain cheap acid. This phosphate rock all contains a small amount of vanadium, and a process has been developed for recover-

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Pa

(Testimony of Blair Burwell.) ing the vanadium from the phosphoric acid solution.

"They expected to be producing vanadium this year, after installing equipment costing about \$200.-000, but they did not feel inclined to proceed with this expenditure this year. I imagine when business is better they will begin producing fused oxide. It is estimated that this plant will produce approximately 100,000 pounds of V2Os yearly, and we have agreed to purchase the output. [165]

"The International Vanadium Corporation has taken over the lead vanadate property at Dripping Springs, Arizona. It is now being managed by one de Villiers, who was for a time employed at Rhodesian Broken Hills. The company is now well financed and the plan is to produce lead vanadate concentrates containing 17 percent V2Os. de Villiers claims that he can do this for 19 cents per pound of V2Os, producing four tons of concentrates per day. This production, if carried through, would amount to approximately 40,000 pounds V<sub>2</sub>O<sub>5</sub> monthly, or 480,000 pounds yearly. They expect to be in production in about three months.

"I have recently made two visits to Dripping Springs and one of our field engineers has sampled the Dripping Springs mine. We have paid particular attention to this operation from its inception several years ago. We could never check the quality or quantity of ore claimed. The last sampling, which was very comprehensive, confirmed our previous impression, and we cannot see

how a profitable operation can be maintained at this place. The ore is entirely too low-grade—containing approximately .20 percent V<sub>2</sub>O<sub>5</sub>, with a small tonnage. There will be, however, some concentrates made at this place, [166] as in the past, but we anticipate that after a few months this operation will have to close.

"For the last two years we have been making a comprehensive investigation of all vanadium resources in the Southwest, which we expect to finish this season. Several attempts have been made to erect small roasters, mills and other equipment for processing these ores on a small scale. So far all of these attempts have met with failure. There is a new one going in now at Gateway and is being managed by Harry Brown, who up until about nine months ago was employed by us at Uravan as a draftsman. It is reported that Harry Brown is being backed by his father and has raised \$20,000 with which to install a 20-ton plant which will be designed to produce fused oxide. He intends to make the roaster from original designs, and it is evident additional funds will be necessary. The ore will be obtained from Polar Mesa and from the deposits on the other side of the Dolores River in the vicinity of Gateway. There are a number of small high-grade deposits in this locality.

"Probably the best of the outside resources are in the southeastern Utah around Blanding and in Dry Valley. Last year, as a result of our investigations, [167] we considered that we should purchase (Testimony of Blair Burwell.) additional property in that locality, and \$200,000 was put into the original 1938 budget to cover these purchases. Due to poor business conditions, however, it was not thought desirable to pursue recommendations for this purpose. We will renew this request in the 1939 budget."——

Then follows the last paragraph (continuing reading):

"We have already purchased two or three groups of claims which were potential producers and could be the nucleus of an operation. The intensive development during the past year has made it more imperative to continue this policy, and it now appears that we should purchase some properties and possibly install a small plant in southeastern Utah to forestall serious competition. A definite recommendation will be made on this as soon as the field work has been finished.

"Very truly yours,

## "J. R. Van Fleet."

Q. (By Mr. Alioto): Now, again, Mr. Burwell, in September, 1938, when he states, with respect to Anaconda—I am sorry, I lost that reference for a moment—yes, when he states with reference to Anaconda (reading): [168]

"It is estimated that this plant will produce approximately 100,000 pounds V<sub>2</sub>O<sub>5</sub> yearly, and we have agreed to purchase the output."——
did you need vanadium oxide? Did you need Anaconda's vanadium oxide in September, 1938?

- A. No.
- Q. Why did you buy it?
- A. To keep it off the market.
- Q. Which market?
- A. The American market.
- Q. Now, Mr. Burwell, this letter is written by Mr. Van Fleet to Mr. Gormely, Mr. Swain, and Mr. Sneath. Did Mr. Van Fleet personally acquire all of the competitive information set forth in the letter, or did you acquire it?
  - A. I acquired it.
  - Q. At whose direction?
  - A. Mr. Van Fleet.
  - Q. And for what purpose?
- A. For the purpose of the report to the directors as outlined (indicating).
- Q. Did Mr. Van Fleet tell you why he wanted this competitive information?
  - A. To make a report to the directors.
- Q. Was there any policy of the United States Vanadium Corporation in that September of 1938—[169]

Mr. Holland: He is leading the witness again.

The Court: Yes.

Mr. Holland: He isn't getting the answers he wants—

Mr. Alioto: Now, Mr. Holland, I object to the reference we weren't getting the answers we want. If we weren't getting the answers we want you wouldn't be objecting.

The Court: Now, just a minute, gentlemen.

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(Testimony of Blair Burwell.)

Mr. Alioto: Thank you, Judge. I think Mr. Holland objects. I will reframe it if he does.

The Court: Reframe it.

Mr. Holland: I'm not mad.

Mr. Alioto: I'm not mad, either, Joe. I'm not mad about anything.

Q. (By Mr. Alioto): Now, Mr. Burwell, state whether or not there was in existence in September of 1938 a policy of the Vanadium Corporation with respect to competitive enterprises.

Mr. Archer: Still leading. I object.

The Court: Sustained. It is calling for a conclusion.

- Q. (By Mr. Alioto): State whether or not there was, in September of 1938, a communication from any superior of yours in United States Vanadium Corporation or Union Carbide with respect to a policy [170] on competitive activities on the Colorado Plateau.

  A. Yes, there was.
- Q. Was this an oral or a written communication to you? A. Oral.
  - Q. And who gave you that oral communication?
  - A. Van Fleet.
  - Q. Anybody else? A. (No response.)
- Q. What was that policy as communicated to you?

Mr. Archer: Your Honor, I object to that as calling for a conclusion—

The Court: Calls for what he has in mind.

The Witness: Shall I answer it?

The Court: Go ahead.

A. Well, I was—my instructions were to acquire all the properties in the Colorado Plateau that would possibly produce vanadium in competition with the United States Vanadium Corporation.

Q. (By Mr. Alioto): To acquire them for what reason?

A. To keep them off the market as producers of vanadium.

Q. What market?

A. The American market.

- Q. (By the Court): Well, now, did you regard that investment in this [171] business—. Here your company had large investments down there. Did you regard that as a good business proposition, the purchase of——
- A. Yes, your Honor. Your Honor, at that time we knew we had a billion-dollar field, and we were playing the cards for a billion-dollar field. And the way you get a billion-dollar natural resource is to acquire it this way. So all may be the tooth and the fang, but this is the way mining engineers proceed—business people proceed—to acquire, control a natural resource, and this policy was directed to me by Mr. Van Fleet, and it was also directed to me previously by other corporation officials previous to 1938. This was a policy that continued from 1926 and had never been stopped.

Q. (By Mr. Alioto): Was it part-

Q. (By the Court): What was your investment, the investment of the defendant companies, in this field?

- A. (Witness searching brief case.)
- Q. Just approximately.
- A. (After producing document): In order that my memory won't trick me, your Honor,—
- Q. (By Mr. Archer): What are you reading from, Mr. Burwell?
  - A. Personal documents of mine. [172]

There was \$1,400,000 invested at that time.

Mr. Archer: Could we identify what he is reading from there?

Mr. Alioto: Now,---

Mr. Archer: Could we have identified what he was reading from? Is it—

The Witness: I was refreshing my memory.

Now I will answer your question, Mr. Archer. There was \$1,400,000, in my recollection.

- Q. (By Mr. Alioto): Did you build a plant at Durango? A. I did.
  - Q. How much did it cost you to build that plant?
  - A. \$103,000.
- Q. How much would it have cost to build a good, adequate vanadium oxide plant on the Colorado Plateau in 1938, Mr. Burwell, producing, let us say, 15,000 pounds of V<sub>2</sub>O<sub>3</sub> a year? A. A year?
  - Q. A month. I am sorry. 15,000 pounds a month.
- A. Of course, that's a very small plant. There were a number of plants built for about \$50,000 to do that job. I believe that would be the figure.
- Q. Now then, with respect to the question asked you by the Court as to whether or not you consid-

ered it a good business policy to acquire these properties that might become [173] competitive if you didn't acquire them, even though you didn't need the vanadium oxide at the time, why did you consider it a good business policy?

- A. Because in our appraisal of the Colorado Plateau, and our viewed anticipation of the vanadium markets and the uranium markets that we anticipated that we would need all the ore that was in this region for future markets, and that we could obtain large profits and large returns as a result of this investment, in the same way that an oil company, for instance, buys or acquires oil reserves far ahead of their immediate needs.
- Q. Was it part of this policy under your directions that you would eliminate any existing competition?

Mr. Archer: I object to the question.

The Court: Sustained. Not the proper question.

- Q. (By Mr. Alioto): Do you know Mr. Bransome of the Vanadium Corporation of America?
  - A. Very well.
- Q. Have you ever had any business meetings with Mr. Bransome of the Vanadium Corporation of America?

  A. A number of them.
  - Q. A number of them? A. Yes.
- Q. Specifically, did you have a meeting with Mr. Bransome [174] of the Vanadium Corporation of America in or about 1939?
- A. I believe that's correct. If my memory is correct, it was just prior to the starting of the Van-

adium Corporation's plant, and I think it was '39 or '40.

- Q. When you say it was just prior to the starting of the Vanadium Corporation plant, do you mean a plant that they started in '39 or '40 on the Colorado Plateau?

  A. At Naturita.
- Q. Located at Naturita. Would you be good enough, by reference to Plaintiffs' Exhibit 26 for identification, to indicate generally where Naturita is?
- A. (indicating) Approximately where my finger is pointing.
  - Q. Just between Uravan and Bull Canyon?
  - A. And Bull Canyon.
- Q. Now, just before the Vanadium Corporation of America opened that mill you say you had a meeting with Mr. Bransome, is that right?
  - A. That is my recollection.
- Q. And where, if you recall, was that meeting held?

  A. That was in New York.
  - Q. And who was at that meeting?
  - A. Mr. Van Fleet, myself, and Mr. Bransome.
- Q. Was anybody else present on behalf of the Vanadium Corporation of America? [175]
  - A. I don't recall anybody else.
  - Q. Where was that meeting held?
- A. My recollection, it was at a club in New York.I don't recall the name of the club.
- Q. What was Mr. Bransome's position with the Vanadium Corporation of America at the time?
  - A. I believe he was president.

- Q. Who fixed that meeting place, at a club in New York?
  - A. Mr. Bransome. It was his club.
- Q. His club? Was there any reason why the meeting wasn't held in his office or your office?
- A. We suggested other meeting places, but the club was selected because it was less public.
- Q. Did Mr. Bransome tell you that he wanted to meet at the club because it was less public?
- Mr. Holland: I object to all these leading questions.

The Court: It is not a proper question.

Mr. Holland: Let the witness testify. [176]

- Q. (By Mr. Alioto): You say it was Mr. Bransome, you testified it was Mr. Bransome who fixed the club as a meeting place?
  - A. That is correct.
- Q. In connection with the fixing of that meeting place, did he say anything to you?

The Court: What difference does it make? How is it material who selected the place?

Q. You went, did you? A. I did.

The Court: Go ahead.

Mr. Alioto: May I continue the question?

The Court: Not along that line you can't.

Mr. Alioto: If your Honor please, I would like at some appropriate point to make an offer of proof because I think it is relevant and I think the Court will agree that it is relevant as to why that place was selected.

The Court: He stated it was a private place. I think that is sufficient.

Mr. Alioto: I won't pursue it if the Court won't let me, but I submit there is an extreme relevancy to the selection of the place, as to why they selected it, why they did not transact this business in their business offices.

The Court: They can transact it down on the street corner, but it is immaterial. What difference does it [177] make? They agreed on this place. Now, go ahead.

Mr. Alioto: I will go ahead.

Q. Tell us as best you remember what discussion took place between you, Mr. Van Fleet and the President of Vanadium Corporation of America?

A. My recollection is this, that Mr. Bransome had told us that they were getting ready to rebuild and start a vanadium plant which had been inactive since 1934 in Naturita and he wished to discuss with us the problem of the ore purchasing and working together in that area because the Uravan plant was 16 miles down the river from this ideal plant, and as long as they were going to be neighbors in the area, they would like to discuss the points of mutual interest with regard to labor rates, what we paid miners, what we paid for ore, what we paid for trucking on contracts, that they would like to work with us in the matter of-these matters-and we discussed-I discussed and Mr. Van Fleet participated in the conversation—we told him -I advised him what our labor rates were, about (Testimony of Blair Burwell.)
what we were paying for trucking per ton mile, and
what we were paying for the purchase of ore at that
time. We were buying a relatively minor amount of

vanadium ore delivered at the plant.

Q. What did you tell him about your ore process if you remember the substance of it?

A. I told him we were paying approximately, I think, 20, [178] 21 cents per pound of vanadium content in the ore, depending upon the grade. That is, the richer the ore, we might make a little higher price, and if it was a little lower grade, we might make a little lesser price, but in general, the basing point was 21 cents a pound, and that had been established as the figure, because it was our approximate cost of producing ore at our own mines.

Our policy at that time I discussed—Mr. Van Fleet discussed—was to purchase the ore at about the same price as it would cost us to produce it from our own mines. In other words, if we could get it from somebody else and conserve our own resources at the same cost we could mine it ourselves, that was the course. Mr. Bransome wanted to know what that price was. We told him, and Mr. Bransome, to my best recollection, said, "All right, we will work with you and we will follow the general or pricing schedule that you have. That was the principal discussion at this meeting.

- Q. Did you in fact after that meeting pay 21 cents for your ore?
  - A. We did, for a while.

- Q. Do you know whether or not the Vanadium Corporation of America paid 21 cents for this ore?
  - A. I did.
- Q. Did you have a subsequent meeting with Mr. Bransome out in Colorado? [179]
- A. Yes, we had a subsequent meeting in Colorado. My best recollection—
  - Q. Do you recall where it was?
- A. My best recollection was it was near Dove Creek.
  - Q. Where is Dove Creek?
- A. That is south of—It is in the Colorado Plateau near the little town of—
- Q. Would it be on this map or would it be off the map?

  A. No, it is on the map.
- Q. Would you indicate approximately where Dove Creek is in relation to that Colorado Plateau?
  - A. It is right here (indicating).
  - Q. In the so-called Slick Rock mining area?
- A. That is right. That is my best recollection. The ore prices—
- Q. Excuse me, Mr. Burwell, before we go on to the discussion, who was present at that meeting besides you and Mr. Bransome?
- A. My recollection was that Mr. Kett was there and some of our personnel.
  - Q. Was a Mr. Hill there?
- A. I am not sure, but I believe he was. At least he was in charge of the ore buying situation and he may or may not have been there, I don't recall for sure.

Q. Would you identify the position Mr. Bransome held at [180] that time in the Vanadium Corporation of America?

A. It was the same, the President of Vanadium

Corporation.

Q. What was the position Mr. F. F. Kett held in the Vanadium Corporation of America at that time?

A. I believe Mr. Kett was either Vice-President or General Manager of Mining Operations.

Q. In any event, he was the general manager of their mining operations?

A. That is right.

Q. Do you recall the approximate time of this meeting?

A. No, I do not. This is a long time ago. I don't remember the details.

Q. Do you know where the meeting was?

A. To my recollection it was in the ore buying station that we were operating for Metals Reserves.

Q. The fact that there was a Metals Reserves Office involved, would that help you fix the time? It would have to be after 1940, wouldn't it?

A. I think it was 1942, somewhere around 1942.

Q. Up to that point you were buying ore from the miners at 21 cents, weren't you?

A. That is correct.

Q. What happened at that meeting? Just tell us the substance of what you said, what Mr. Kett said, what Mr. [181] Bransome said or what anybody said?

A. At this meeting or at this particular time,

and with the qualification that this was some time ago, Mr. Bransome said that the prices that we had been paying, 21 cents a pound, was only resulting—he couldn't get enough ore at 21 cents a pound to feed his mills, that he, the V.C.A., were dependent upon purchased ore while you fellows—me, Blair Burwell—have all your mines; you are not dependent upon purchasing ore. We were only purchasing about ten or fifteen per cent of our ore.

He said, "We are not going to go along with the 21 cents any longer. We are going to pay 31 cents whether you like it or not."

- Q. What did you say?
- A. I said, "All right, we will pay 31 cents, too."
- Q. After that meeting did both of you pay 31 cents for the ore? A. We did.
  - Q. Do you know a man named Ralph Blitz?
  - A. Yes.

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- Q. Who was he?
- A. I think he was their general superintendent or local plant manager at Naturita—the Vanadium Corporation plant after it resumed operations in 1942.

Mr. Alioto: At this time, if your Honor please, [182] we offer into evidence as our exhibit next in order, a letter dated November 2nd, 1941, written by S. Power Warren to Mr. Blair Burwell and Mr. W. G. Haldane on the interoffice correspondence stationery of the United States Vanadium Corporation.

Q. Before we make the offer formally, would you be good enough to identify Mr. S. P. Warren?

A. He was our general superintendent of the U.S. Vanadium, general superintendent at Uravan, Colorado.

Mr. Alioto: We will offer this into evidence, if your Honor please. The authenticity has already been established in pre-trial conferences.

The Court: Very well, it may be admitted.

Mr. Alioto: I will offer

(The document referred to was thereupon received in evidence and marked Plaintiffs' Exhibit No. 35.)

[See Book of Exhibits.]

Mr. Alioto: I would like permission to read the portion of it relating to Mr. Blitz at this point. If anybody else wants to read any other portion, I have no objection.

Mr. Archer: What page is that?

Mr. Alioto: That is on page 3. This is written by Mr. Warren, the superintendent at Uravan, to Mr. Haldane, with a copy to Mr. Blair Burwell, under date of November 2nd, 1941:

"In connection with this sampling plant, [183] and with the necessity for good samples, I feel I have run onto an interesting condition which may or may not exist, but which I will call to your attention, and await your suggestions.

"As you well know, the Vanadium Corporation of America have been having a hard time getting ore. When they first came into the district, or rather,

when I first arrived here, there was plenty of evidence that they were increasing the price paid for outside ore. Blair's trip in here and his discussion with Blitz remedied that matter."

- Q. Do you remember that discussion with Mr. Blitz, Mr. Burwell? A. Yes.
  - Q. Where did it take place?
- A. I don't recall for sure; either Naturita or Urayan. I think probably Urayan.
- Q. Was Mr. Blitz at the time superintendent for the Vanadium Corporation of America?
  - A. He was.
  - Q. Was anybody else present at that discussion?
  - A. I don't recall.
- Q. Will you be good enough to state the substance of what was said?

Mr. Holland: If the Court please, Mr. Blitz, the [184] only one there present, is deceased, and we object to it.

Mr. Alioto: I submit, if your Honor please, that this is a corporate act, following a meeting with Mr. Bransome.

The Court: Who was Blitz, now?

Mr. Alioto: He was the superintendent of their mines.

Mr. Holland: Mill.

Mr. Alioto: Mill, and this relates, or is in line with the conversations the witness has attributed to Mr. Bransome and Mr. Keet, who were their top officials, and this subject matter of ore prices was discussed. It is an important act.

Mr. Holland: This is a minor official who is now deceased and has been for some years.

The Court: You are asking now for Mr. Blitz' conversation?

Mr. Alioto: The conversation which Mr. Burwell, the witness in the chair, had with Mr. Blitz, and it relates to subject matter that Mr. Bransome and Mr. Keet had previously participated in, according to this witness' testimony. I submit it is a corporate act, and the fact that Mr. Blitz is not available for testimony does not make it inadmissible.

The Court: Go ahead and answer the question. I [185] do not see its materiality.

The Witness: I asked Mr. Blitz what he was paying for ore and he told me. I don't remember exactly what it was, but it was more than 21 cents. And I asked him to check with Fred Kett as to what the prices of ore we agreed to be.

I said, "You had better check this matter with Fred and see what his ore prices are. If you will ask Fred, I would appreciate it."

And that is all I said.

Ralph said he would talk to Mr. Kett. I suppose he did. I don't know. That is the last I heard of it.

- Q. (By Mr. Alioto): Did you thereafter speak either to Mr. Kett or to Mr. Blitz on the subject matter?

  A. No.
- Q. Do you know whether thereafter the Vanadium Corporation of America paid the 21 cents for the ore?

  A. I think that is correct.

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Q. Mr. Burwell, I want to take you to a meeting with Mr. Bransome at the end of 1947 or the beginning of 1948. Do you recall having a meeting with him? We are getting farther apart. We are getting up to 1947 or 1948. Do you recall a meeting with him on the subject of uranium as against vanadium production was brought up in either December of 1947 or January of 1948?

A. December 1947 or January of 1948? [186] Yes, yes, I had a talk.

Q. Where do you recall was that meeting held?

A. At the office of the Vanadium Corporation of America in New York.

Q. Who was present at that meeting?

A. Mr. Bransome.

Q. And yourself? A. That is right.

Q. Nobody else? A. That's right.

Q. Will you be good enough to tell us the substance of what you said and what Mr. Bransome said on the occasion of that meeting?

A. That is a big answer. I will endeavor to answer it as concisely as I can, your Honor. Many years have elapsed.

Mr. Archer: Your Honor, may I interpose just one question?

Q. Were you still employed by United States Vanadium at this time?

A. I had resigned December 11, 1947, and I was just trying to—no, I had resigned on December 11. 1947, prior to this conversation.

Mr. Archer: Then I object to the conversation.

I take it it is not offered against the United States Vanadium.

Mr. Alioto: This conversation at this point is [187] offered against the Vanadium Corporation of America as a declaration of its President, who, of course, is alive.

Q. Will you be good enough to state what was said?

The Court: Answer the question.

A. I told Mr. Bransome that we had been-I had been concerned with the problem of uranium production for the atomic period we were entering, that we had prepared—that I had prepared a proposal for the building of a central plant on the Colorado Plateau near Naturita which would have a capacity of from 500 to a thousand tons per day, and I had directed and designed with the Manhatan District's pilot plant operations conducted in 1943 a process study, assisted by Union Carbide, which was a plant design. This plant was designed to recover the uranium first using a soda ash leatching process, the same process practically that Naturita is using today, and that the vanadium that was in the ore would be held as a residue to be marketed with or in proportion with vanadium markets, and that the respect this proposal had been made was that we would not hold back the production of uranium by forcing it to come through plants that processed for vanadium first and then for uranium. which was limiting uranium production, that this plant had been designed and prepared for the ob(Testimony of Blair Burwell.)
jective of meeting the future needs of the Colorado Plateau.

I felt it was a very essential thing everybody who [188] had any interest in the field would cooperate with it, that I had been in touch with this problem with the Union Carbide and submitted a plan and proposal to the Union Carbide in a previous year, of Mr. Rafferty and Mr. Van Fleet and the rest of the Union Carbide group that I had worked with had approved it as a solution of the problem that was dogging us or troubling us, and the utilization of the ores of the Colorado Plateau for uranium production free from the limitations of the uranium business.

This plan I discussed with Ted Bransome. I told him that I had previously talked with Mr. March Hurst, who was President then and is President now of the Molybdenum Corporation of America, that I had recommended to the Atomic Energy Commission, that I had recommended to the Union Carbide Company that the Molybdenum Corporation of America be given the operation of this plant independent of the Vanadium Corporation of America, of the U. S. Vanadium Corporation, in order that these warring differences and disputes over vanadium market could be eliminated in the future. and that this plant had cost the government, the United States Government, approximately \$400,000 for pilot planting in Grand Junction, Colorado, that it was fully developed, that it was the plan for the future, that General Groves and the Manhattan

District had approved this plan as one means of continuing without the ups and downs in the harnessing of this region in the two-way vanadium [189] market, and the finagling that was going on with those questions that you have heard in this court.

Mr. Bransome questioned me about this plan in some detail. I told them that Mr. Hurst did not feel at the moment that he wanted to get into the picture unless everybody would agree that an independent alloy-producer or operator was mutually desirable. I do not think Mr. Hurst was very warm to the proposal, anyway.

Mr. Bransome said, "Blair, supposing—"

- Q. Mr. Burwell, by inadvertence you are putting your hand over your mouth.
  - A. I am sorry.
  - Q. That is all right.
- A. Independent producers of ore, and there were a number at that time that had developed—"I suppose these independent producers of ore had vanadium and uranium ore and brought their ore up to this central plant that you propose. The vanadium then would be turned back to them to sell or to dispose of, isn't that correct?"

I said, "Yes, that's correct." I said, "We cannot in this particular emergency deny any person the right to get his vanadium back," that this situation had now become bigger than either the Union Carbide or the Vanadium Corporation of America in my estimation.

Then he asked this: What would happen if somebody [190] like Continental Ore or Mr. Leir shipped some ore to this central plant? Would he get the vanadium back?

I said, "Surely, he would."

So would anybody else who owned the ore. They would all have to have the same right.

Mr. Bransome said, he paced back and forth in his office, he said, "That would put Mr. Leir in the vanadium business and that is what we are trying to keep him out of."

And I looked at Ted and I turned around and walked out of the door. And that was the end of the conversation.

The plan was never put into effect.

The Court: The plan was not carried out?

- A. No, because of the objection.
- Q. (By Mr. Alioto): Did you have any agreement on the Colorado Plateau with Vanadium Corporation of America that you would respect each other's customers?

Mr. Holland: I object, your Honor. He is starting to lead the witness again.

The Court: I didn't get your question.

Q. (By Mr. Alioto): The question is: Did you have any agreement on the Colorado Plateau with the Vanadium Corporation of America that you would respect each other's customers with respect to all purchases?

A. I don't quite understand. Do you mean the miners?

Q. The miners, yes. [191]

A. In other words, if there was a miner selling ore to the Vanadium Corporation, that we would not attempt to buy his ore?

Q. That is what I mean. Now, just a minute. There is an objection.

Mr. Holland: I just objected to the form of the question.

The Court: He has answered.

Mr. Holland: Calling for the conclusion of the witness. He can state the agreement if there is such an agreement.

Q. (By Mr. Alioto): What was your answer?

A. There was no agreement that I had any part of.

Mr. Alioto: We will offer in evidence and ask to be marked as Plaintiffs' next in order a letter dated December 24th, 1941, from Mr. Haldane to Mr. Western, to Mr. Burwell and to Mr. Coleman.

Q. Would you be good enough to identify Mr. A. H. Coleman, Mr. Burwell?

A. He was assistant general superintendent at Uravan at one time and then became general superintendent, depending on the time of that letter.

Q. This letter is dated in 1941. What would Mr. Coleman's position have been in 1941?

A. I don't recall for sure, either general superintendent [192] or assistant general superintendent.

Mr. Alioto: We will offer this document into

evidence, if your Honor please. Its authenticity and genuineness have already been established in the pre-trial proceedings.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit No. 36.)

Q. (By Mr. Alioto): This document is dated December 24th, 1941, "Custom Ore, United States Vanadium Corporation, Mr. W. G. Haldane."

What was his position in 1941, Mr. Burwell? Was he your assistant then?

A. He was my assistant.

Q. This letter is directed to Mr. J. E. Weston with copies to Mr. Burwell and Mr. Coleman. It is an airmail letter from New York to Uravan, Colorado:

"Dear Joe:

"Yesterday Mr. Kett of the Vanadium Corporation of America called up protest against some attempt on our part to take a customer away.

"The story is that you went to one Lyen operating in the Cedar District, offering him \$2.00 per ton above the established rates, which he in turn reported to the Vanadium Corporation of America. Knowing nothing of the circumstances surrounding the case or of Lyen, either, I advised Mr. Kett that I [193] would look into the matter. Will you kindly give me the details of this case.

"With kind regards, and with best wishes to yourself and Mrs. Weston for a Happy and Prosperous New Year, I am

"Yours very truly, Mr. W. G. Haldane."

It is now 12:00 o'clock. Does your Honor want to take the recess?

The Court: We will recess until 2:00 o'clock.

(Whereupon a recess was taken until 2:00 o'clock this date.) [194]

Tuesday, June 3, 1958—2:00 O'Clock P.M.

## BLAIR BURWELL

a witness on behalf of the plaintiffs, on the stand at the time of recess, having been previously duly sworn, resumed the stand and testified further as follows:

## Direct Examination—(Resumed)

- Q. (By Mr. Alioto): Mr. Burwell, I direct your attention now to a meeting of the board of directors of Union Carbide sometime in 1946. Do you recall attending such a meeting?

  A. I do.
- Q. Was this the board of directors of the top corporation itself, or one of the subsidiaries?
- A. Well, it was a meeting not of the board of directors, but of the executive officials of—the vice-presidents of Union Carbide & Carbon Corporation.
- Q. And do you recall the approximate date of that meeting?
- A. I believe it was in the latter part of '46, possibly in November, December.

- Q. It was in the post-war period, in any event?
- A. That's right.
- Q. Do you recall who was present at that meeting?
- A. Yes, I do. Mr. Haggerson, president of the company, presiding; Mr. Priestley, president, then, of metal-chemical [195] division; Mr. Rush, I believe, who was counsel—I don't think he had an official position—he might have; Mr. Davidson, as I recall, president of Union Carbide & Carbon Company—vice-president of the company; Mr. Mc-Clure, I believe, vice-president of one of the divisions. I believe there were three or four other vice-presidents of the corporation who constituted the active management of the Union Carbide & Carbon Corporation.
  - Q. You were present at that meeting, were you?
  - A. I was present at that meeting.
  - Q. Where was the meeting held?
- A. It was held on the 18th floor, I believe, of the 30 East 42nd Street general offices, in the meeting room off Mr. Haggerson's private office.
  - Q. That is the Union Carbide Building?
  - A. Union Carbide.
  - Q. In New York? A. That's correct.
- Q. Will you tell us as best you remember the substance of the conversations that were had there with respect to vanadium?
- A. The purpose of my appearing before this committee was to—

Mr. Archer: Could we have the conversations, your Honor?

The Court: Beg your pardon? [196]

Mr. Archer: Could we have the conversations, rather—

Mr. Alioto: That is what he was giving.

Mr. Archer: I thought he was talking about the purpose of it.

The Court: Well, it is introductory, I think.

The Witness: That's correct. You have to understand the purpose before you would understand the conversation, Mr. Archer.

A. (continuing) I was appearing before the corporation at the request of Mr. Rafferty to explain the expenditure of approximately \$57,000 for the uranium-vanadium plant at Rifle, Colorado. plant was a new plant, contained new methods of processing, and was planned as part of the future corporation policy to produce uranium and vanadium. I had spent approximately \$70,000 without getting the proper or the usual budget approval, because the project had developed between formal budget meetings of these general officers. And as it was technically an overrun of budgets, I was requested by the corporation to explain the reason for—as a matter of more or less routine. This group was meeting to consider other similar budget overruns that had occurred in the fall of the year after the regular budget meeting, which I think had occurred sometime previously. There was approximately, I would imagine, four or five million dol(Testimony of Blair Burwell.)
lars involved in overruns [197] that were being discussed.

Q. (By Mr. Alioto): Who presided at that meeting?

A. Mr. Haggerson presided at that meeting.

Mr. Priestley requested me to explain the expenditure of seventy or eighty thousand dollars, somewhere in that amount—it was not a great amount—in that meeting for the six month period for the uranium-vanadium plant, and that I proceeded to do, to the directors, with an introduction that this was the start of the corporation uranium participation in the future after the atomic bomb had fallen, and the thing—and the completion of the Manhattan District Project. And I told the group of directors something of the objectives of the corporation as I represented it at that time in this particular meeting, towards the future importance of uranium in the atomic program, to the corporate opportunity of the Union Carbide Company.

Mr. Priestley interrupted the general statement by asking me if we were going to produce additional vanadium as a result of this uranium plant. And I explained to Mr. Priestley, and to the directors and the vice-presidents, that we would, of course, produce some additional vanadium, but the principal purpose was uranium for the future.

Mr. Priestley took me somewhat to task for spending any money for uranium at this time, when we would produce [198] vanadium that we couldn't sell.

My discussion then, in order to sell, or to convey to the directors the reasons for my expenditure of corporate funds, that the future of uranium was so important that uranium had to be obtained ahead of vanadium, and without any regard to whether you would sell vanadium or not.

And Mr. Priestley indicated that he didn't think uranium was of any immediate importance to the corporation, and how was I going to sell the vanadium that I was getting from this additional uranium plant?

And I again, I believe quite patiently, although I was becoming slightly irritated, conveyed the purpose of this uranium-vanadium plant.

Mr. Priestley asked me how much vanadium we had unsold at that time. I told him approximately a million pounds, a million and a quarter.

He said, "How are you going to sell this additional vanadium?"

"Well," I said, "I imagine that could be disposed of if we would reduce the price, research the usages of vanadium more intensely." We were already doing that. I felt that vanadium could be taken care of.

And he again said, "I don't see any justification for you producing any more vanadium at this time at a uranium plant, because if you can't sell it, what are you going to do [199] with it, how are you going to sell the vanadium?"

I therefore then told Mr. Priestley that it was not my business to sell vanadium: that if he

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(Testimony of Blair Burwell.)

couldn't sell vanadium, to please say so, and that we would take over the job of selling vanadium, and I would assure him that I wouldn't sell vanadium or make a deal to the V.C.A., nor would I be indicted by the Anti-Trust Division again—I had already been indicted——

Q. (By the Court): You had already what?

A. I had been indicted. I was under criminal indictment at that time for vanadium—

Q. (By Mr. Alioto): For anti-trust violations in the vanadium industry?

A. I said I would sell this vanadium "if you can't."

Mr. Haggerson pounded the table and said the conversation was getting rather out-of-hand.

I said, "If there are any more questions in regard to the uranium, gentlemen, please let me know," and I left the meeting.

Q. I think at the time you made your statement as to what you told Mr. Priestley about his inability to sell, you had your hand over your mouth, and I am not sure that I quite understood it. What was it, precisely, you told Mr. Priestley when you started out saying "If you can't sell it, turn it [200] over to the United States Vanadium Corporation"?

A. "We will sell it and we won't have to make a deal to the V.C.A. to do it, either."

Q. Now, in the same year did you have a conversation with Mr. Priestley, that same Mr. Priestley, and Mr. Rafferty, in about October of 1946, in New York, with respect to some competitive bid-

(Testimony of Blair Burwell.)
ding to the United States Government on vanadium?

- A. I believe that's correct. And—I am not sure—it ran ahead of this meeting of the directors, or whether it was behind it.
- Q. Whether it was ahead of this meeting or behind it, do you recall that it was sometime in 1946?
- A. I believe that it was in October of '46. I am not sure.
  - Q. Do you recall where that meeting was?
  - A. Mr. Rafferty's office.
  - Q. Do you recall who was present?
- A. In New York. Mr. Priestley, Mr. Rafferty, myself.
  - Q. Who was Mr. Rafferty?
- A. Mr. Rafferty was senior vice-president of Union Carbide and Carbon Corporation, chairman of the board of United States Vanadium Corporation.
  - Q. And who was Mr. Priestley at that time?
- A. Mr. Priestley at that time I believe was vicepresident of the corporation in charge of the metal division. [201]
- Q. Is that vice-president of Union Carbide & Carbon, the top corporation?
  - A. That's correct.
- Q. Did he have an office, also, in the Electro Metallurgical, in United States Vanadium?
- A. I believe he did. Yes now, I am not quite too sure about whether he had an office in United States Vanadium Corporation. He shortly after-

(Testimony of Blair Burwell.)
wards, or at that time, was president of United
States Vanadium Corporation.

Q. What was the substance of the discussion you had at that meeting in New York?

## A. Well,—

- Q. I'm sorry. At that time you were the vicepresident of the United States Vanadium Corporation, were you not? A. That's correct.
- Q. And you were a director of the United States Vanadium Corporation? A. That's correct.
- Q. And you were head of the mining functions for that company, were you not?
- A. Well, I was vice-president in charge of all the operations, which included mining.
- Q. All right. Tell us the substance of that conversation, Mr. Burwell.
- A. I have a memorandum which will refresh my memory—— [202]
- Q. Well, can you remember the conversation without the memorandum? Do you recall the subject matter of it? What did it relate to?
  - A. Well, I will have to give this—the conversation—if we chop it there, it's hard for me to answer it. I will have to tell you why this conversation occurred—I mean how—what—how I happened to be in Mr. Rafferty's office.
    - Q. Well, how were you in the office?
  - A. Because it doesn't make sense to answer questions—
    - Q. I understand.
    - A. It would be just futile to do it.

Q. Why were you in that office?

A. Sometime before that we had a million and a half, two million pounds of vanadium—a few weeks before that the government, the treasury procurement in Washington, announced their intention to buy vanadium for the stock pile at that time, and announced that they would accept bids for that vanadium oxide from various—from the vanadium companies, whoever would have the vanadium.

I discussed this matter with Mr. Priestley and, I think, Mr. Remmers, and Mr. Rafferty, Mr. Van Fleet—the matter of policy meeting. And I was directed to make a bid to the treasury procurement in Washington for this vanadium at 98 cents a pound.

At that time Mr. Priestley said he thought we ought to [203] go after the business and authorized me—we ali agreed that we would bid 98 cents per pound. We had information, or some supposition, or some knowledge, that probably the Vanadium Corporation of America would bid \$1.00.

So I made the bid for 98 cents a pound, and had a call from Washington that a larger amount of vanadium would be included if we would reduce the price slightly; that we were the low bidder; and would pay the freight—and I think that meant something like 97 cents a pound, It would involve from 98 cents, a cent a pound for the reduction for freight—that we could have the entire stock pile order, as we were low bidder on that basis.

So I conveyed this to Mr. Priestley, Mr. Remmers, Mr. Rafferty, chairman of the board, Mr. Van Fleet.

Shortly after that Mr. Priestley had called me and told me not to agree to the 97 cents a pound; that he thought it would be better to give the Vanadium Corporation part of the business, and that I should withdraw my offer or go to Washington and tell them that we ought to consider the other vanadium producers in this business.

And I promptly rang Mr. Rafferty up on the P-A-X phone, the little intercommunicating phone between my office, 1426, and the 18th floor, Mr. Rafferty's, and told Mr. Rafferty that I had this call from Bill Priestley, and that he wanted to back out on the sale and tell the government that [204] we would reconsider—like to have the Vanadium Corporation included in this business.

Mr. Rafferty said, "Come on up. Bill is in front of me right now. I'm just getting into this thing."

And now is the meeting that you asked me.

- Q. All right. What happened at that meeting, then?
- A. I sat on the corner over at one side. Mr. Priestley was sitting in the front, on the little chair on the carpet. Mr. Rafferty was sitting in his—Mr. Rafferty is the senior vice-president, atop Mr. Priestley in prestige. Mr. Rafferty was talking to Mr. Priestley when I came in, and I sat over—sat down in the corner on a chair.

Mr. Priestley-or Mr. Rafferty was questioning

Mr. Priestley about this thing, and he says, "Bill, what do you mean about—what do you mean about giving V.C.A. a part of this business? I thought we had agreed that we would try to move our excess stocks and get it out of here."

"Well," Mr. Priestley said, "I believe that I considered-I think Blair ought to go down to Washington and get ahold of"-I think his name was Chaffee-"and tell him that V.C.A. ought to be considered in this position."

Mr. Rafferty said, "Bill, Blair over here is under indictment for this monopoly case. Of course, you know that." He said, "That would be very unwise, for us to go down to Washington, or for Mr. Burwell to go down there and openly ask [205] for the Vanadium Corporation to be included in their business. What is your idea, Bill? What's going on about this business?"

Mr. Priestley said, "Well, I have just heard that the - had 'word from Mr. Swain" - I knew Mr. Swain, vice-president of the Electro Metallurgical Company. Mr. Priestley said, "Mr. Swain has just told me a short time ago that he had prevailed upon the Vanadium Corporation of America to increase the price of ferro-chrome silicon to the point that it would not be used as a substitute for lowcarbon ferro-chrome, and I don't want to antagonize the V.C.A. at this time, and therefore, I would like to have part of this business so we can continne along."

Mr. Rafferty said, "Mr. Priestley, do I under-

stand that you are still conniving on this business with the V.C.A.? I thought we were all over that kind of monkey-business." And he took Mr. Priestley pretty much at heart. I was sitting there, now, to be frank, enjoying it just a little bit.

End of the conversation.

Q. Now, at that time Mr. Priestley was, in fact, was he not, the head man in the vanadium business for Union Carbide?

A. Well, I would judge he would be. We had somewhat a mixed command.

Q. (By the Court): What was the result of your deliberations?

A. The result of the deliberations, your Honor, I went [206] back to my office on the 14th floor, and Mr. Rush called me up and asked me about the conversation.

Q. (By Mr. Alioto): Who was Mr. Rush?

A. He was attorney for Union Carbide & Carbon Corporation.

He said he had just heard it from Mr. Rafferty, and he said Mr. Haggerson had already got hold of the story. "Hold tight, will you?"

Q. (By the Court): Said what?

A. "Don't do anything."

And a short time afterwards one of the—I had a message; I think it came from Mr. Rafferty, or Mr. Priestley, or from somebody upstairs, that told me to go ahead with Mr. Chaffee on our 97-cent bid. And so we went ahead and sold vanadium on the 97-cent bid.

- Q. (By Mr. Alioto): Was this as late as October, 1946?
  - A. That is my best recollection.
- Q. I want to direct your attention now, Mr. Burwell, to a plant that you folks had down in Durango. I think you have already testified that you built that plant for something more than a hundred thousand dollars during the war.
  - A. That's right.
- Q. Was that built with government funds or with private funds? [207]
  - A. Government funds.
- Q. And you actually supervised the building of that plant, did you? A. I did.
  - Q. And you ran it? A. I did.
- Q. Now then, that plant was actually a government plant during the time you were operating it, wasn't it?
- A. It was a government plant operating by United States Vanadium Corporation as agents for the Metal Reserve Company.
- Q. Did you folks have some kind of an option to buy that plant at the termination of the war?
- A. We had an option to purchase the plant for its cost less depreciation, so much a year, which amounted to approximately \$25,000 a year.
- Q. You bought this plant for \$25,000?
- A. No; the depreciation amounted to \$25,000 a year.
  - Q. Well, you bought the whole plant?

A. At any time the government declared it surplus, at \$25,000 a year, approximately,—

Q. Do you recall what it was you paid for this plant?

A. I would say about \$75,000.

- Q. How many tons were you—what was the capacity of that plant with respect to the tonnage of ore? [208]
  - A. A hundred tons a day.
  - Q. A hundred tons a day.

Now, before you exercised that option to buy that plant from the government had you heard from any source that some competitors were trying to get ahold of it? A. Yes. [208-A]

Q. (By Mr. Alioto): Who were the competitors who were trying to get hold of it?

A. Mr. Sitton and Mr. Brinker. Mr. Sitton was a mine owner, a miner, at Delta Creek, Colorado.

Q. And who was Mr. Brinker?

A. Mr. Brinker was a metallurgical engineer living in Durango, Colorado. I think he is at present employed by the Vanadium Corporation of America.

Mr. Holland: Good man.

Q. (By Mr. Alioto): At that time did they propose to set up an independent operation in Durango?

A. I don't know what they proposed.

Mr. Archer: I object.

Mr. Alioto: Let me put this document in itself and we will get to it directly. We will offer as

Plaintiffs' Exhibit next in evidence a telegram from Mr. Blair Burwell to Mr. W. G. Haldane on February 29th. The telegram does not have the date but I think the connecting correspondence will fix it in 1944.

Q. Is that your recollection as to the year in which you sent the telegram?

A. I think that is about right.

Mr. Archer: Yes, it is February 29th.

Mr. Alioto: 1944. Mr. Archer, would you have any objection as to my writing "1944" on February 29th? [209]

Mr. Archer: \I would appreciate it.

Mr. Holland: This is offered against whom?

Mr. Alioto: It is offered against Union Carbide and its subsidiaries. We will offer this in evidence, if your Honor please.

(The telegram referred to was thereupon received in evidence and marked Plaintiffs' Exhibit No. 37.)

Mr. Alioto: I would like to read this to the Jury, if I may. It is very short. It is a telegram from Mr. Blair Burwell to Mr. W. G. Haldane:

"Brock advises that Brinker with Sitton and other promoters are reported to be planning to take the Durango plant in case we do not recapture it stop. This is rumor only but suggest you advise Mr. Rafferty regards. Blair Burwell."

Q. Who is Brock, Mr. Burwell?

A. He was our general superintendent at the plant at Durango at that time.

Mr. Alioto: We offer as Plaintiffs' Exhibit next in order a memorandum from Mr. Haldane to Mr. Rafferty, with a copy to Mr. Blair Burwell, dated March 6th, 1944. The authenticity and genuineness has already been worked out in pre-trial stipulations, if your Honor please.

(The document referred to was thereupon received in evidence and marked Plaintiffs' Exhibit No. 38.) [210]

[See Book of Exhibits.]

Mr. Alioto: This exhibit, ladies and gentlemen, dated March 6, 1944, starts out by saying, "Dear Mr. Rafferty: I am attaching hereto a memorandum summarizing the situation at Durango."

And the attached memorandum under the title is "Durango Plant." The following language appears: "United States Vanadium Corporation considers it highly essential that it acquire this plant for the following reasons:

"1. To maintain its position in the vanadium industry of the Southwest. Repeated reports have reached this company of plans of outsiders to acquire the plant in the event United States Vanadium Corporation decides not to exercise its option. The injection of additional operators in this field would undoubtedly seriously disturb conditions in the vanadium industry in the post-war period."

This is 1944.

Q. Mr. Burwell, who were the so-called outsiders

(Testimony of Blair Burwell.)
who were trying to acquire this plant? Was it Mr.
Sitton?

The Court: Now, just let him answer. Do you know?

- A. That was contained in the report, the telegram in which I said Sitton, Brinker and other people. They were the people I was mentioning. Mr. Haldane to my knowledge referred to those people. [211]
- Q. (By Mr. Alioto): At this time in 1944 there was no shortage of vanadium, was there?
  - A. No, no.
  - Q. In other words, this is March 6, 1944.
  - A. No, we had large stocks of vanadium.
- Q. As a matter of fact, the Metal Reserves program with respect to some of the independent mills like Nisely and Wilson had already been terminated?

  A. That is right.
  - Q. By this date? A. That is right.
- Q. Isn't it a fact, Mr. Burwell, that the purpose of this Durango acquisition was to keep out competition?

The Court: Now, just a moment.

The Witness: I think the purpose——

The Court: Just a minute. Your question is leading and suggestive. Let him state the facts.

Q. (By Mr. Alioto): State the facts with respect to the purpose for the acquisition of the Durango plant.

The Court: Why did you want to buy the plant? Did you think it was a good proposition?

The Witness: We wanted the plant to keep control of the production of vanadium.

The Court: That was your business, wasn't it! The Witness: That was our business. [212]

The Court: Did you see anything wrong about that or improper?

The Witness: Not at that time, as a loyal Carbide employee, no. That was part of the job, to fortify the corporation's position.

- Q. (By Mr. Alioto): When you answered the judge's question and said you bought the plant in order to control the production, what did you mean by that?
- A. Well, to keep other production from coming in from other people.
  - Q. You mean competitors?
- A. Well, the vanadium on the market in competition with us.

Mr. Alioto: We offer next, if your Honor please, on this subject matter a letter of the Vanadium Corporation of America dated March 21, 1944.

Mr. Holland: Just a minute. Can I see it for a minute, counsel?

Mr. Alioto: Yes.

- Q. (By the Court): This plant that you speak about buying from the Government, did you say the Government put up the money to build it and you operated it?
  - A. That is correct.
- Q. When you bought it you merely continued your operation?

- A. Correct. We operated for the Government account, [213] delivered the vanadium to the Government, when we were operating during that period. When we were operating for our own account we used the vanadium for our own purposes.
- Q. (By Mr. Alioto): Were you operating both the Uravan and the Durango plants after this acquisition?
- A. Refresh my memory on the dates there, please.
  - Q. March of 1944.
- Mr. Archer: I believe it was October, 1944, Mr. Burwell, when you bought the plant.
- A. I believe the Uravan plant was shut down in mid-1944, but we were operating a plant at Rifle at that time, and the plant of Uravan was operated until mid-1944, when we shut down because we had over stocks of vanadium.
- Q. In other words, you shut down your Uravan plant before you bought the Durango plant?
  - A. If these dates are correct.
- Q. Mr. Archer has given us the date of October, 1944, the actual purchase of the plant.
  - A. I think that is correct.

Mr. Alioto: We will offer in evidence a letter from Mr. D. W. Viles, Assistant Manager, Western Division, Naturita, Colorado, to Mr. F. F. Kett, General Manager, Mining Division of the Vanadium Corporation of America, under date of March 21, 1944.

Mr. Archer: I take it this is against only Vanadium! [214]

Mr. Alioto: That is correct, at this moment.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 39.)

[See Book of Exhibits.]

Mr. Alioto: This letter by the Assistant Manager of the Western Division of the Vanadium Corporation of America reads as follows:

"In regard to the purchase of the Dry Valley property belonging to the Moly Corporation, there is considerable low-grade ore in the Frisco and Water Falls group and this property, in my mind, if it could be purchased, say for \$2,000, would be a good investment if only to prevent some outsider getting ideas in regard to the Monticello plant."

- Q. Mr. Burwell, I want to direct your attention to some meetings with respect to the sales and the business of the Union Carbide and/or its subsidiaries. Do you recall a meeting at the Vitro Corporation plant at Pittsburgh in 1940?
  - A. Yes.
- Q. Do you recall who was present at that meeting?
- Λ. I believe Mr. Fleck of Vitro Corporation. Mr.—the Secretary. I don't recall his name myself.
  - Q. Was his name Strodd?
  - A. Mr. Strodd. [215]
  - Q. What was your position with the United

States Vanadium Corporation at the time? That was in 1940.

A. Well, I was assistant to Mr. Van Fleet in charge of operations under Mr. Van Fleet.

Q. What was the conversation that took place? Mr. Archer: I object to that, your Honor. This was with Vitro. It certainly has nothing to do with

these defendants.

Mr. Alioto: Your employee was there. This man was the assistant to the General Manager in charge of mining. I do not see how he can say it has nothing to do with him.

The Court: Go ahead and answer the question. Exception allowed. I do not see its materiality.

Mr. Alioto: I think it will be established in a moment, if your Honor please.

Mr. Holland: Mr. Alioto, may I ask you against whom this is offered?

Mr. Alioto: As of the moment it is being offered only against Union Carbide and not against your client, Mr. Holland.

The Witness: Will you repeat the question, please?

Q. (By Mr. Alioto): What was the substance of the conversation between you, Mr. Vitro and Mr. Strodd in 1940?

A. I discussed with Mr. Strodd and Mr. Fleck the sale of the remaining uranium. We had the uranium concentrates [216] available at that time produced at Uravan.

- Q. What were they using the uranium concentrates for?
  - A. They were using it for pigments.
  - Q. Pigments?
- And also the concentrates contained vanadium in about equal quantity, and I discussed the disposal of the vanadium along with the uranium. I was negotiating a sale to the Vitro Chemical Company for approximately 100,000 pounds of uranium, which we later carried through. Stodd went over and discussed with me at that time also their needs for vanadium. They had use for vanadium and had use for vanadium and had been using fused oxide for the purposes of their plant. They were having trouble with it because it was not quite adaptable to conversion into colors. I asked him where they got it. He said they were getting it from VAC. I asked him why they were using fused oxide, the hard stuff there, instead of red cake. He said they had never used the red cake. I suggested that we would sell him the red cake instead of the Vanadium Corporation of America fused oxide.

He was interested in using red cake. We discussed the technology involved with Mr. Strodd. and beyond that we concluded or set up the basis for the sale of uranium, and that was the end of the conversation.

Q. Now, then, did you subsequently report this conversation to anybody in the Union Carbide organization?

- A. Yes, my recollection—I was in Pittsburgh, and as a [217] matter of courtesy I called on the local vice president or whoever is in charge of sales for Metallurgical Company. I think that was Mr. Dutot.
  - Q. How do you spell that name?
  - A. D-u-t-o-t, I believe.
- Q. And he was connected with the Electro Metallurgical Company?
- A. He was connected with Electro Metallurgical Sales.
  - Q. Did they have an office in Pittsburgh?
- A. They had an office in Pittsburgh, and I recall talking to he and I think his representative. Now, there may have been others there. I think there were. I think there was a Mr. Ford also there at that time. I mentioned the sale of vanadium coming up to red cake and took Dutot—called him "Baldy"—a little bit to task for not selling vanadium, that we had a great stock of vanadium, a surplus of it out West and our mines were shutting down. And Mr. Dutot said, "VC is selling their vanadium." The VAC had apparently been selling their vanadium, and we were not calling on the VAC customers.
- Q. How did it mappen that you were in Pittsburgh trying to sell this red cake to the Vitro Company?
- A. I was not trying to sell the red cake to the Vitro Company. I was trying to sell uranium, and as a side issue and incidental toward the sale of

uranium I came in contact with the fact that they had a market for vanadium, and that [218] the vanadium market amounted to a hundred thousand pounds of vanadium oxide, and it was an important sale. So I went after the sale, although I was no salesman on uranium—in fact, this was something on the side. I am not a salesman and I really did not call I think for the purpose of selling vanadium. I probably was a little bit semi-critical of the Carbide's organization for sleeping at the switch when there was a market for a hundred thousand pounds of vanadium going begging there, and we picked up the market.

- Q. (By the Court): You said you made the deal?
- A. I made the deal in this way, that I reported it then to New York and let the Electro Metallurgical Sales make the contracts for the vanadium exide, but I was the person who brought them together and engineered the sale and then later—
- Q. The sale was made in accordance with your suggestion?

  A. That is correct.
  - Q. (By Mr. Alioto): That is the red cake sale!
- A. That is right, and we sold them 100,000 pounds of uranium approximately for around a dollar a pound, and we sold them the vanadium and red cake for some price similar to that, set the prices on those.
- Q. Do you recall a meeting with Mr. Dutot in July, 1946, with respect to sales matters?
  - A. Yes.

- Q. Where was that meeting held? [219]
- A. That was also in Pittsburgh.
- Q. Who was present on that occasion?
- A. Mr. R. D. Sullivan, Mr. Dutot, and I believe again Mr. Ford.
  - Q. Do you recall what was said?
- A. Again I will have to tell you the background of what we said, because what I said would not make sense.
  - Q. All right.
- A. If I could have that leeway in answering the question.

The Court: Go ahead.

A. I had gone to Pittsburgh with Mr. Sullivan and the General Superintendent of our mines for two purposes: One was to obtain certain types of drill steel from the Crucible Steel Company for our mining operations out west, and Mr. Sullivan also was directing or assisting in the sales of a new division that U. S. Vanadium had organized called the Metal-Chemical Division of U. S. Vanadium. Mr. Sullivan was sales manager as well as superintendent out west, and I think one of those exhibits has the little indication of the Metal-Chemical Division of U. S. Vanadium.

Anyway, we went down there for two purposes. One was to see about selling tungsten concentrates which we were making out in our mines in California, and at the moment had too much of—couldn't sell—and also making an arrangement to get some special drill steel made by Crucible Steel

for [220] purposes in our mines, as the drill steel had a hole inside, a hollow drill steel that enabled us to get more air down into the drill, into the bit. And so we asked Mr. Dutot if he could arrange a meeting with the president of the Crucible Steel Company. We had a carload or better ordered of steel, an important thing, and I said we should get some reciprocity on this thing. "We have vanadium, we have tungsten and other things. Let us work this so if we buy a carload of drill steel, let's see what we can do about getting some of this vanadium business and some of the uranium business." He arranged a meeting with the president of the Crucible Steel, and I don't recall his name at the moment.

Mr. Archer: Is that Mr. Felsinger?

The Witness: Mr. Archer, I don't remember that name either. I don't think it was.

Mr. Archer: It wasn't Mr. Cauldin, was it?

Mr. Alioto: I think Mr. Archer would no longer object on the basis of leading questions.

The Witness: I have a terrible memory for names and I am always apologetic about it.

Q. (By Mr. Alioto): In other words, it was the president of the Crucible Steel Company?

A. That is right. So we met with the Crucible Company, but Mr. Dutot, before we left, he said, "Don't mention vanadium to the Crucible Steel. Don't bring it up. Don't try to sell [221] them vanadium as a favor to me."

I said, "Why?"

"Well, they have been getting their vanadium from the Vanadium Corporation of America, ferrovanadium, and we were told not to approach the customers of Vanadium Corporation of America, and so you will embarrass me if you talk to them about it."

Well, we did talk to the Crucible Steel about taking and smelting tungsten and placed an order shortly afterwards for a carload of steel, and I went to New York and reported the matter to Mr. Rafferty. [222]

- Q. Did Mr. Dutot tell you who gave you those instructions?
- A. He said he got his instructions from Mr. Remmers and Mr. Priestley—those were his superiors in the company.
- Q. And this was in October of—in July of 1946,was it? A. I think that's right.
- Q. Now, Mr. Burwell, there is one more meeting out in Colorado I would like to cover before we go into the matter of joint operations of the two companies on the Colorado Plateau after 1938.

Now, with respect to that meeting do you recall——

The Court: Before you get to that——Mr. Alioto: Yes, sir.

Q. (By The Court): Now, was there anything unusual in having these arrangements with people that you were on good terms with? In other words, did you think it was all right to try to take a customer away from another company?

- A. Why, I think so, if we had unsold vanadium and men that we were having to lay off. The essence of our whole enterprise depended upon going to a customer, or actively sell our wares. It was considered good business in the end corporation. With expanded sales, the usual way they did was competitive calls and maybe lower price. They might—the usual manner to go into business. Why, I don't think it's the usual thing not to do it. [223]
- Q. Suppose this other company tried to make a sale to one of your good customers that had been with you a long time, what would have been your attitude?
- A. That would be perfectly all right. If they could give better prices, better services, we would have to whip up our ability to produce, ability to sell, or get out of the business.

The Court: All right, go ahead.

- Q. (By Mr. Alioto): Now then, with respect to any additional meeting at Colorado, do you know a Mr. Sneath?
  - A. Yes, I knew Mr. Sneath.
  - Who was he? Q.
- Mr. Sneath was an officer, I think vicepresident, of Electro Metallurgical Company. I think he was president of Electro Metallurgical Company at Canada. He had other positions in Europe. I don't know exactly. The subsidiary in Norway-Electric Furnace Plant at Sauda, Norway. He was an officer of the company.

- Q. Did you have a meeting with Mr. Sneath out in Colorado in 1939? A. Yes.
  - Q. Where was that meeting held?
  - A. At the Uravan plant.
- Q. Was anybody there besides Mr. Sneath and vourself? [224]
- A. Mr. Van Fleet, I believe—I am sure Mr. Weston was there; Mr.—a number of our—I'm not sure that Mr. Haldane was there-I don't think so. We had other employees—superintendents and other active people.
- Q. (By The Court): These were all officers of the subsidiary companies of the Vanadium Company? A. That's right.
- Q. (By Mr. Alioto): Would you be good enough to tell us the substance of those conversations, Mr. Burwell?

Mr. Holland: Is this being offered against Carbide?

Mr. Alioto: It is offered against the Carbide on the usual-

A. In order to answer you intelligently and tell what this meeting was, what led up to it-

The Court: Go ahead.

A. (Continuing) -Mr. Van Fleet and Mr. Sneath came out together by arrangement with Mr. Gormely the year before and went all over the mine area, the mining properties, with the purposes of seeing what our producing capacity was in vanadium, and discussing the problem of disposing of excess vanadium which we had on hand

in 1939. Again our situation had continued to become somewhat troublesome and desperate. We had [225] an increasing stock of vanadium, even over the '38 danger point.

- Q. (By the Court): What year was this?
- A. '39, the year after the Gormely meeting.

Mr. Gormely suggested that we get Sneath out there to see what he could do to sell this vanadium to Europe to some of his friends across the water, and if we could get Mr. Sneath down to Urayan and show him the layout and—he had never been out there,—but that he might understand what this thing was all about, in so far as our mines went, and our needs for selling our output.

And so Mr. Sneath and Mr. Van Fleet arrived at Uravan for the purpose—that purpose, and the conversation occurred with that background.

I participated in this discussion and reviewed the fact again that we were producing vanadium quite cheaply, something like 35, 38 cents a pound; we were the lowest cost producers in the world; and we had a great volume of vanadium there, and we had to look ahead to the future to get markets. But meantime we had 1,700,000 or more pounds of unsold vanadium which we were unable to sell because the Vanadium Corporation of America had started in to import vanadium from their new concentrating plant in Peru and had more or less broken off the volume of purchases of oxide from us, and we [226] were needing to move that amount or vanadium or we would have to shut down.

Mr. Sneath promised to do what he could abroad to sell this excess vanadium, and he said he had friends and associates over there, particularly Sir Edmund Davies, who was working closely with him in England. Sir Edmund Davies was, Mr. Sneath told me—and I also knew it before from conversations with his group—was associated with Union Carbide in England and in the Rhodesian Chrome Company and the African Manganese Company, and he was a part or an associate in the so-called cartel group that handled the affairs of Carbide in chrome, manganese, and alloys, in Europe.

And as the conversation proceeded beyond the question of the immediate disposal of vanadium, which Mr. Sneath promised to look into as soon as he got back to New York, and we continued the discussion in the evening, and we had very fine steaks and some very good Scotch whiskey, and a very-everybody got discussing the background of the European situation and the marketing of vanadium and chromium, ferro alloys, and the history of the ferro-chrome business, and Mr. Sneath reviewed at that time, at the time following World War I, when the Germans were actively engaged in the dumping of surplus materials in other countries at lower prices, in excess of what they could absorb in Germany, and it was about that time that the Anti-Dumping Act was brought up against the Germans, [227] and Sneath mentioned that the Germans had started dumping the low-carbon ferro-chrome, which was the main money-maker

of Electro Metallurgical Company—that paid 75 percent of the profits of Electro Metallurgical Company—had begun to dump low-carbon ferrochrome into the United States and in England, and they, therefore, set up a counter-activity against the German eartel, which was principally directed by-headed by the senior Gruenfeld, which -who I am sure many people in this courtroom know-he was the head of the German allov trust. And due to the manipulation of the cartel, there was only one or two alloy plants running in all England after World War I. The chromium was being imported out of Germany back into England.

The Saude works was created, I was told, to supply England and the United States and the European market with the cheap hydroelectric power of Norway. Therefore, to protect their own business on low-carbon ferro-chrome, Mr. Sneath told how they cut the price and dumped the chromium, ferro-chromium, into Germany, tit-for-tat, for everything that the Germans had started dumping in their territory. That is the conventional, usual way these cartels work, until they get together.

- Q. Now you are relating a statement by Mr. Sneath?
  - A. The conversation, yes, sir.
- That is Mr. Sneath's statement as what occurred over there in Europe? [228]
  - That's right. Α.
- Q. (By Mr. Alioto): This statement was made in 1939? A. At this time,—

Q. Yes.

A. — when I was taking part in the conversation. I was with Mr. Van Fleet, exploring the whole arrangements that they made.

The further information that I got from Mr. Sneath, as I best recall it, was that the Germans agreed not to dump any more low-carbon ferrochrome or alloys into certain trade areas if Electric Furnace Company of Norway would not dump any in their back yard, in their trade areas. And so it was closed out.

It developed soon after that that without any competition, without anybody producing low-carbon ferro-chrome in the United States but Electro Metallurgical Company, that the danger of investigation became known to Mr. Sneath, they felt they had done a job, the attorneys advised them to go ahead and set up some competition in the United States of low-carbon ferro-chrome, or encourage somebody to become a competitor of low-carbon ferro-chrome in the United States; otherwise they would be subject to anti-trust action that was then beginning. I think that's the first time—

Mr. Holland: May it please the Court, your Honor [229] felt, I think, that this case should not go back of 1938. If we go into this old picture on the basis that somebody told it to Mr. Burwell in 1939, we will have to go into all of it, too.

Mr. Alioto: Now, if your Honor please, he is about to come to a portion of the conversation that relates to Mr. Holland's client and the vanadium

business, and I think he should be permitted to finish a conversation that was given in '39.

Mr. Holland: It's all pre-'38 stuff.

Mr. Alioto: Relating to '39, relating to the existence of a situation in '39.

Mr. Holland: No; it is just nice conversation they had after a couple of Scotches.

Mr. Alioto: I think if he has an objection-

- Q. (By the Court): Go ahead and finish your story. Limit it to the conversation.
- Q. (By Mr. Alioto): Now, the conversation with respect to the Vanadium Corporation—
- A. I was told that the Vanadium Corporation was set up there by agreement or understanding, not written, to sell low-carbon ferro-chrome in the United States, although they didn't produce it, the Vanadium Corporation. Mr. Reece was [230] the one that had carried on those discussions, Mr. Holland.
  - Q. (By Mr. Holland): He is dead, isn't he!
- A. He is, unfortunately. Too many people are dead in this picture.

Anyway, Mr. Sneath said that the company was set up, Vanadium Corporation, to sell low-carbon ferro-chrome, and in turn for which Carbide, they had agreed—he had agreed that the Union Carbide-Electro Metallurgical Company would not compete in the vanadium field in the alloys, would let the Vanadium Corporation of America set the price and be the leaders in the market.

Mr. Holland: I ask that all be stricken, your

Honor. That all goes to pre-'38 material. Or that the defendants be permitted to introduce anything pre-'38 that they wish.

Mr. Alioto: I think, if your Honor please, it is a statement as to an agreement with respect to prices.

Q. (By the Court): You say it is '39?

A. Yes.

Mr. Alioto: Yes.

Q. (By the Court): When was this agreement that you are talking about?

A. I don't know. Mr. Sneath didn't tell me the date of [231] the agreement. But it was prior to '38.

The Court: Well, the jury will disregard this statement.

Mr. Alioto: Well, let me ask-

Q. (By Mr. Alioto): In that connection, Mr. Burwell, whether Mr. Sneath at that time said or implied that the agreement was still in effect as of '39?

Mr. Holland: He is leading the witness again. The Court: That is leading and suggestive. You can ask him what occurred there. Don't tell him what occurred, but ask him what occurred.

Mr. Alioto: Well, I have in mind, if your Honor please, that I think the sense of the conversation up to this point is precisely an explanation of why they couldn't move these big stocks.

Q. (By Mr. Alioto): Mr. Burwell, am I mistaken—did you testify in this record that there



was a discussion of why—how to move the stocks you had on hand?

A. Why, sure. That was the purpose of the meeting. This was incidental to the problem of the meeting. And we couldn't move our stock because Mr. Sneath—the agreement—Mr. Van Fleet stated that the agreement was in force, to the best of his knowledge; we couldn't sell vanadium, according to this [232] agreement.

Mr. Alioto: Excuse me.

I was requesting, in view of that, your Honor, that the Court reconsider its direction to the jury to disregard the conversation. Here was an explanation of why they couldn't sell their stocks in 1939.

The Court: Yes, I understand that.

Mr. Holland: And further, your Honor, Mr. Burwell—

The Court: Mr.—one of these officers, he said.—
The Witness: Van Fleet.

The Court: —they had an understanding or agreement prior to '38.

The Witness: Well, Mr. Gormely had told me that the year before; in a private meeting in '38 Mr. Gormely said that the agreement was still in force; they couldn't get around it.

Mr. Archer: I didn't get that. May I have it read back?

Mr. Holland: Further, your Honor, Mr. Burwell testified yesterday that they did sell this stock. and that Mr. Sneath did sell it to Europe.

Mr. Alioto: Sold it abroad; not in the United States. [233]

Mr. Holland: At a higher price than he could have gotten in the United States.

The Court: We will have to go back to '38 for any agreements or understandings.

Mr. Alioto: Well, I want to be sure the record is—I am not sure about the state of the record.

The Court: You can have an exception to the ruling of the Court. Let's get along with this case.

Mr. Alioto: Well, I want to exhaust this conversation, if your Honor please, because I think the record is now muddied on this conversation, and I think I owe it to my clients to try to get it cleared up. I would like to proceed in that fashion. I don't want to be frightened into not protecting this record for these people, if your Honor please.

The Court: We are taking a lot of time on this —a lot of time.

Mr. Alioto: If it relates to the existence of an agreement in 1939, we consider it rather important. I would appreciate—

The Court: Go ahead with your question and we will see whether or not it is material.

Mr. Alioto: Thank you.

Q. (By Mr. Alioto): Now, with respect to this conversation, has it been your testimony that the purpose of this meeting was to figure [234] out ways and means of selling the excess stock you had?

Mr. Holland: I object to the question—

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(Testimony of Blair Burwell.)

A. Yes, I testified to that-

The Court: That is in the record; he has testified to that.

Q. (By Mr. Alioto): Did you at that time say anything about lowering the price in order to sell, the stock?

A. Yes,—

Mr. Holland: I object-

A. —we did.

Mr. Holland: —to the leading questioning.

The Court: Objection sustained.

Q. (By Mr. Alioto): State whether or not you made any suggestion about disposing of the stock.

The Court: Now, just a moment.

Just let him state what happened there. Don't tell him what happened, but let him state what happened.

Q. (By Mr. Alioto): State, if you will, what was said by you, or by Mr. Sneath, or by Mr. Van Fleet.

The Court: I think you have already gone over this before.

A. We—I recommended—the purpose of the visit was to [235] discuss the disposal of the stocks, and we recommended the sale of this vanadium by reducing the price and selling it in the United States.

Mr. Sneath said he would try to sell it in Europe: he didn't think he wanted to—could sell it in the United States.

Q. (By the Court): He said what?

A. He didn't think we should sell it in the

United States by lowering the price, and he thought he should—could sell it in Europe.

Q. Mr. Sneath? A. Mr. Sneath.

Q. Well, now, he is not—he was not connected with any of these companies?

Mr. Alioto: Yes, if your Honor please—a very important official of Union Carbide.

The Court: Let the witness testify.

A. Mr. Sneath is connected with these companies, wes; he was vice-president of Electro Metallurgical Company.

Q. (By the Court): Oh. That is one of the subsidiary companies?

A. That's right. And he is living.

Mr. Alioto: And I understand he is going to be here, if your Honor please. [236]

Q. (By Mr. Alioto): Now, did Mr. Sneath on that occasion tell you why it shouldn't be sold in the United States at a lower price?

A. I can't say that he told me why—just why. We all knew why. But I don't remember that he sat there and said, "Blair, we can't sell it because we have an agreement with these boys not to——"

Mr. Holland: Object to having him testify to what he didn't say.

The Court: Let's not say what he didn't say.

Q. (By Mr. Alioto): The point we are getting at, Mr. Burwell, in what relation, or in connection with what subject, did he tell you the story about ferro-chrome and vanadium?

A. Well, in connection—ferro-chrome, the story,

what he explained to us, because of this ferrochrome agreement they could not cut the prices in the United States and undersell the Vanadium Corporation. That was the point of the whole story about ferro-chrome. That was the background for the reason why—

Mr. Holland: This is an indirect way of going—Mr. Alioto: Just a minute.

I think there should be an objection and not a statement.

Mr. Holland: I object and ask that the answer be [237] stricken on the ground that it is an indirect way of attempting to go prior to '38, which your Honor has ruled is not to be a part of this case.

Mr. Alioto: Submit, if your Honor please, that the witness has said that the reason they couldn't cut the price in '39——

The Court: The jury will be instructed—is instructed to disregard now these matters that occurred prior to '38.

Exception is allowed.

Q. (By Mr. Alioto): Now I want to ask year. Mr. Burwell, about certain joint operations between the Vanadian Corporation of America and—

Does your Honor want to take a recess at this time? I note that the Court is looking at a watch.

The Court: Take a recess for about ten minutes. (Short recess.) [238]

Q. (By Mr. Alioto): Mr. Burwell, I believe

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(Testimony of Blair Burwell.)

you testified that there was no shortage of vanadium in November, 1953, and you fix it by the fact that you started to suspend some of the metal reserves contracts in or about that time?

A. That is correct.

Mr. Holland: Mr. Alioto, wasn't that 1940—— Mr. Alioto: No. 1943.

Q. I will ask you, isn't it a fact that at the end of 1943 you gave notice to Nisley and Wilson, the independent oxide producer at Gateway, that the Government contract would not be renewed?

A. That is correct.

Q. Do you have any recollection as to whether or not there was a shortage of vanadium oxide at the end of 1943?

A. There was no shortage. There was a surplus of vanadium at that time.

Mr. Alioto: We offer at this time, if the Court please, a request of the Continental Ore Company to the Vanadium Corporation of America for oxide in November, 1943.

Mr. Holland: No objection.

(The document referred to was thereupon received in evidence and marked Plaintiff's Exhibit 40.)

Mr. Alioto: We offer as plaintiff's exhibit next in evidence an answer of the Vanadium Corporation of America to the Continental Ore Company with respect to this matter. [239]

(Whereupon, document referred to above was received in evidence and marked Plaintiff's Exhibit 41.)

Mr. Archer: What is the date of that?

Mr. Alioto: The date of the response is November 19, 1943.

Mr. Holland: May it please the Court, may I ask this: These letters we have admitted the authenticity of. The first letter to which I made no objection was one from Mr. Leir, is that correct!

Mr. Alioto: That is correct, and the second one is one from Mr. Gustaf Laub, the Assistant Vice-President of the Vanadium Corporation of America.

Mr. Holland: Are you planning to eall Mr. Leir to testify?

Mr. Alioto: Oh, yes, Leir will testify in this case. Are you planning to call Mr. Laub?

Mr. Holland: Yes, we are calling Mr. Laub.

Mr. Alioto: We offer as plaintiff's exhibit next in order a request in November, 1943, or rather two requests made to the metallurgical company by the Continental Ore Company and the answer of the Electro Metallurgical Sales Corporation to the Continental Ore Company.

Mr. Archer: May I have the dates on these!

Mr. Alioto: Yes. The date of the first letter of the Continental Ore Company is November 17, 1943; the second [240] date is November 30, 1943;

the letter of Electro Metallurgical Company to Continental Ore Company is November 30, 1943.

(The documents referred to were thereupon received in evidence and marked Plaintiff's Exhibit 42.)

Mr. Alioto: I respectfully request permission of the Court to read these letters to the jury. They are requests and answers.

The first letter is from the Continental Ore Company, dated November 16, 1943, to the Vanadium Corporation of America, Attention: Mr. Laub:

"Gentlemen:

"Re: Vanadium Pentoxide

"We would appreciate your offering us: 10,000 to 15,000 pounds of V2Os contained in vanadic oxide, per month.

"We would be ready to sign a contract with you for a fixed length of time.

"Very truly yours,

"Continental Ore Company,

"Henry J. Leir."

The answer of Vanadium Corporation dated November 19, 1943:

"Gentlemen:

"Re: Vanadium Pentoxide

"In response to your inquiry of November 16th requesting quotation on 10,000 to 15,000 pounds, monthly, of V2O3 contained in vanadic oxide, we regret very much that due to our present commitments we are not in the position to take on this additional tonnage at the present time.

"Perhaps if you are still interested at a later date and our situation changes, we will be glad to look into the matter further at that time.

"Regretting our inability to be of service to you at this time, we are,

"Very truly yours,

"Gustaf Laub, Assistant Vice-President."

Mr. Holland: May it please the Court—pardon me, Mr. Alioto, I do not mean to interrupt you—but may I ask Mr. Alioto if Mr. Leir will testify in respect to these matters? I want to be able to cross-examine Mr. Leir on those matters.

Mr. Alioto: If your Honor please, when Mr. Leir testifies, counsel can cross-examine about these matters if he wants to, but I submit that is independent evidence standing on its own feet. Mr. Leir will be here to testify.

Now, the next exchange of correspondence is between the Continental Ore Company and the Electro Metallurgical Sales Corporation.

On November 17, 1943, a letter from Mr. Leir to the Electro Metallurgical Sales Corporation:

"Gentlemen:

"We would appreciate your offering us: 10,000 to 15,000 pounds of V<sub>2</sub>O<sub>3</sub> contained in fused vanadic oxide," per month.

"We would be ready to sign a contract with you for a fixed length of time.

"Very truly yours,

"Continental Ore Company,

"Henry J. Leir."

On November 30th, Mr. Leir writes again and says, this being to Electro Metallurgical Sales Corporation:

... "We have not as yet received a reply from you to our letter of November 17th, of which we enclose a copy since the original may have gone astray.

"We would very much appreciate hearing from you regarding this matter at your earliest con-

venience.

"Very truly yours,

"Continental Ore Company,

"Henry J. Leir."

The answer of the Metallurgical Sales Corporation of the Union Carbide is dated November 30, 1943.

Mr. Archer: This obviously is not an answer. I think there is a later letter there.

Mr. Alioto: The answer states as follows:

"Referring to your inquiry for fused vanadic oxide, [243] in view of the many uncertainties prevailing at the present time, we do not feel that we should undertake supplying your regular requirements for this material.

"Very truly yours,

"Electro Metallurgical Sales Corporation,

"By W. E. Remmers."

Q. (By Mr. Alioto): Did it ever come to your attention, Mr. Burwell, that the Continental Ore Company had made a contract with the Apex Smelting Company for the manufacture of ferrovanadium?

A. Oh, I had heard about it, Mr. Alioto, not in any official and definite way.

Mr. Alioto: We offer at this time, if your Honor please, a series of inter-office correspondence, inside the Vanadium Corporation of America.

Mr. Archer: These are not offered against Union Carbide?

Mr. Alioto: That is correct.

Mr. Archer: Or in connection with Mr. Burwell's testimony.

Mr. Alioto: I did not understand that last remark.

Mr. Archer: You asked Mr. Burwell about this, and he said he had not heard about it.

Mr. Alioto: I simply asked him whether he had heard about it. That is all I asked. He said he had. Now, [244] then, we offer as against Vanadium Corporation of America a series of inter-office memoranda dated February 20, 1942, March 14, 1942 and April 14, 1942, relating to the Apex Smelting Company, as one exhibit.

Mr. Holland: To which we object, your Honor, on the ground no proper foundation has been laid for it. These letters concern the relations between Mr. Leir and the Apex Smelting Company, of which Mr. Burwell knows nothing. There has been no foundation laid to show that they are in any way relevant. It will depend upon the testimony of Mr. Leir in respect to his Apex contract to prove their relevancy. They are introduced out of order.

Mr. Alioto: If your Honor please, these stand on their own, and they show negotiations between this organization and Apex Smelting Company with respect to the Continental contract. I did not understand. Is the objection on the basis of irrelevancy or immateriality?

Mr. Holland: No proper foundation laid as yet. The Court: Between the defendant company and Apex, you say; does it refer to Mr. Leir?

Mr. Alioto: Oh, yes. That is all it refers to. This is not between this company and Apex. This is between one member of this defendant company and another member of the same company. As long as the objection has been made that no foundation has been laid, I take it, Mr. Holland, in accordance with our prior understanding that there is a stipulation of genuineness and authenticity.

Mr. Holland: Oh, yes, they are authentic.

Mr. Alioto: And that Mr. Bransome, one of the men to whom it is directed, was President of the Vanadium Corporation of America.

Mr. Holland: Yes.

Mr. Alioto: Mr. Laub was the Vice-President:

Mr. Holland: That is correct.

Mr. Alioto: And Mr. Christianson was a Vice-President.

Mr. Holland: There has been no foundation laid as to the relevancy of any correspondence relating to Apex Smelting Company. The proper order would be to put in Mr. Leir's contracts with the Apex Company.

The Court: Perhaps it would be better for you to offer it in order.

Mr. Alioto: If your Honor please, there is testimony by this witness, while he is still on the stand, about a conversation with Mr. Bransome in which Mr. Bransome is purported to have said they were trying to keep the Continental Ore Company out of the vanadium business. I submit it is in the proper development of this witness' testimony, and I think we ought to give some manner in the order of proof, that this testimony of attempting to get at Apex ought to go in at this [246] point. I would like your Honor to read that. I think its relevancy is immediate apparent.

Mr. Holland: It is 1942 correspondence, and the testimony relating to Mr. Bransome was in 1948 or December, 1947. It has nothing to do with the conversation in 1947.

The Court: The objection is sustained, temporarily. You can introduce it at the proper time.

- Q. (By Mr. Alioto): Mr. Burwell, did your company have any joint mining operations on the Colorado Plateau with the Vanadium Corporation of America in 1938 or thereafter?
- A. Not joint mining operations, no. We mined properties of the Vanadium Corporation of America. We had no joint mining operation.
- •Q. You say you mined on properties that belonged to Vanadium Corporation of America!
- A. Yes, we mined on properties belonging to the Vanadium Corporation of America.

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- Q. Do you have some name in the industry or in the trade by which you used the properties of Vanadium Corporation of America, that your company mined in 1938 or 1939?
- A. Yes, they are designated by the names of the mining claims. There was a Maggie C., the Coloradian, the Donald L. mining claims in the Paradox mining region.
- Q. Would you be good enough to designate on this map, if you would, Mr. Burwell, the approximate location of those [247] mining claims of the Vanadium Corporation of America which your organization mined?
- A. They would be approximately under the "a" of "Uravan," right here in the Colorado Plateau.
- Q. Would all the claims mentioned by you in this record be located where you have indicated?
- A. At the start, all claims. Later on, they expanded into Dry Valley.
- Q. Did you personally participate in the negotiations—first of all, were there negotiations with the Vanadium Corporation of America about mining these claims?

  A. Oh, yes,
  - Q. And mining on their claims?
- A. That is right. I participated in the discussions, arrangements of the mining, the terms of the mining and all the details.
- Q. With whom did you negotiate or who was the party representing the Vanadium Corporation of America in these discussions?
  - A. My recollection is Mr. Kett.

- Q. What was Mr. Kett's position?
- A. He was General Manager for the Vanadium Corporation of America.
- Q. Could you fix the approximate time of these discussions?

Mr. Holland: Do you want to put in the contract? That will fix the date. [248]

The Witness: I believe it is a matter of record and it speaks for itself as to the time.

- Q. (By the Court): What kind of contract or what kind of arrangement did you have?
- A. There was an agreement called the Maggie C. agreement drawn up between the two companies.
  - Q. What kind of agreement did you have?
- A. It was an agreement that we would mine the ores from these mines belonging to Vanadium Corporation of America, process the ore in the Urayan plant, and turn the vanadium oxide over to the Vanadium Corporation of America for a charge, a total charge of 65c a pound, and that I believe was prior to 1939. I believe it went back to 1937-'38, but I wouldn't say for sure.
- Q. Well, let me show you the contract. I think the date is in 1939. [249]

Mr. Alioto: I can fix the date by offering, if your Honor please, the minutes of the Vanadium Corporation of America. They don't contain the actual date, but there is a reference to the date on the appropriation which I think fixes the time in '39.

Mr. Holland: We have no objection to the intro-

duction of this, your Honor, provided the agreement itself is offered.

Mr. Alioto: The agreement itself will be in after we fix these negotiations, Mr. Holland.

· We will offer it in evidence.

The Clerk: Plaintiff's Exhibit 43 admitted and filed into evidence.

(Minutes of Vanadium Corporation of America received in evidence and marked Plaintiff's Exhibit 43.)

- Q. (By Mr. Alioto): Now, then, regardless—I think that regardless of the date which you may have in mind at the moment, would you be good enough to tell us what discussions took place between you and Mr. Kett about your company mining their claims?
- A. Yes. Mr. Kett and myself discussed the arrangements for producing vanadium from their claims, and I was advised by Mr. Van Fleet to enter into these negotiations and arrangements of details with Mr. Kett because Vanadium Corporation of America had come to him in New York and requested a certain amount of [250] vanadium to be delivered to them, and they proposed, as long as they did not have an operating plant in that country, that we would use our plant and mill their ore both in their mines and that was in their stockpile and in their mill bins at Naturita.

And so on those directions from New York, Mr. Van Fleet who had been in touch, I presume, with the Vanadium Corporation in New York, I dis-

maybe there were others there at the time, but I think he was the one—an arrangement whereby we would take the ore out of the mill bins at Naturita of the Vanadium Corporation mill that had been mined or out of their stockpile at their mill at Naturita, which was about 14 miles from the mines, and then go upon these mining claims and mine and deliver ore and deliver to them the vanadium, and we would be paid 65c a pound for our services in mining and milling and in the production of the fused oxide for the recovered vanadium and delivered to them under that arrangement.

Mr. Kett was to have access to the records and to look over the mining operations and make any suggestions as to the method of mining and other details, I believe, were arranged between us as to carrying on the work.

- Q. (By Mr. Alioto): Mr. Kett was to have access to whose records?
- A. U. S. Vanadium Corporation's records—of production, [251] the tons removed, the grade and percentage of vanadium oxide, all the things that made up the accounting for vanadium.
  - Q. Now, was that agreement in fact carried out?
- A. Yes, it was carried out and completed, insofar as this area and discussion—
- Q. Do you recall the approximate period of time that it took to carry out that agreement?
- A. I believe it took a year or possibly two years to mine and remove the ore of the particular min-

ing claims that I mentioned, the Maggie C. and other claims. Approximately two.

Mr. Alioto: Now, Mr. Holland, I do not happen to have the contract with me at the moment—

The Court: Do you happen to recall when that began?

The Witness: I am trying to refresh my memory. It may have been '42. No, it was prior to the Vanadium Corporation starting their plant. And you have the date here. I am confused a little on this thing. I would rather not—

'Mr. Alioto: If your Honor please, Mr. Holland suggested that he would like the contract at this point. We have no objection to that, but I don't have my copy available at the moment. I will be very happy to have your copy, Mr. Holland.

The Witness: I think it was probably '39, and I refresh my memory by looking back. This is 20 years after it [252] happened and I am not infallible.

Mr. Holland: Here is a somewhat battered original, Mr. Alioto (handing to counsel).

Mr. Alioto: Fine. Thank you.

I will be very happy to have this copy replaced and returned to you, unless you have no desires in the matter.

Offer it into evidence, if your Honor please, the contract that the witness has referred to.

The Clerk: Plaintiff's 44 admitted and filed into evidence.

(Contract received in evidence and marked Plaintiff's Exhibit 44.)

[See Book of Exhibits.]

- Q. (By Mr. Alioto): The date of this contract, signed by Mr. Bransome and Mr. Van Fleet, is June 30 of 1939. Now, then, Mr. Burwell, I show you a copy of a document which purports to be signed by you, written to the Vanadium Corporation of America under date of April 7, 1942, and ask you if that refreshes your memory as to when —how long you operated on the Vanadium Corporation of America claims.
  - A. Could I see the letter, please?
- Q. Yes, sir, after Mr. Holland has looked at it.Mr. Holland: Are you referring to the MaggieC. operation under the Maggie C. contract?

Mr. Alioto: We will get to it. You take a look at this letter, Mr. Burwell, and you explain to us—you [253] explain for us to which of the claims that letter refers (handing to witness).

- A. (Witness examining.) This letter refers to the operations of the claims I just mentioned, the Maggie C. and others in Colorado, and also includes a later addition to the contract in Dry Valley, Utah; in 1942 that this arrangement and mining had been completed, and this states that this is the final statement. I signed it. I remember the letter.
- Q. The final statement is under what date, Mr. Burwell?
  - A. 1942, April 7 of 1942.
  - Mr. Alioto: Thank you. We will offer this in

(Testimony of Blair Burwell.) evidence, your Honor, as the plaintiff's exhibit next.

Mr. Holland: Dry Valley-

Mr. Alioto: We are going into the Dry Valley agreement. We have a copy of it, Mr. Holland.

Offer this into evidence.

The Clerk: Plaintiff's Exhibit 45 admitted and filed into evidence.

(Letter April 7, 1942, Burwell to V.C.A. received in evidence as Plaintiff's Exhibit 45.)
[See Book of Exhibits.]

- Q. (By Mr. Alioto): Now, then, Mr. Burwell, we want to cover—I think I started out—we will go into a few of these joint arrangements and the next in order would be the Dry Valley. Did you personally participate in any negotiations with the Vanadium Corporation of America with respect to that [254] property?
- A. Yes. In the same way that I participated in the Maggie C. and Cripple Creek, and, in fact, it was a continuation of the same kind of negotiations. But the Dry Valley area, however, was not in Colorado; it was over in this section in Utah (indicating).
  - Q. When you say—
  - A. Where my finger is (indicating).
- Q. When you say "this section in Utah," you are pointing your finger at a section approximately two inches above the word "Monticello"?
- A. That's right, and approximately 75 miles west of the Maggie C. and Cripple Creek.

Q. Would you be good enough to state the facts with respect to what that Dry Valley operation was about?

A. Well, the Dry Valley operation was a continuation of the Maggie C. contract, because after we had mined all the available ore out of the Maggie C. and other claims that were contained in the original agreement, the Vanadium Corporation needed more vanadium than was contained in those ores and so they drew ahead on their account; in other words, they asked for vanadium to be delivered in advance of mining and they owed the U.S. Vanadium Corporation vanadium in excess of what was obtained from the Maggie C. claims. Therefore, the Dry Valley property had been acquired by U. S. Vanadium Corporation some [255] time after that and afterwards was turned back to the Vanadium Corporation of America due to a conflict between the two companies in policy. And I won't bring that in. And, therefore, the Dry Valley had belonged to the Vanadium Corporation of America at that time under lease arrangements but United States Vanadium Corporation was mining it, and we proceeded to mine the additional ore: out of the Dry Valley claims that was needed to give the Vanadium Corporation the pounds of vanadium oxide which they had drawn ahead of their account on the Maggie C.

They had asked for more vanadium than was contained in the ores and we gave them the vanadium before the vanadium was produced out of

the ores. We had lots of vanadium on hand and, therefore, when we came to settle up the account, they had received more ore on the delivery agreement than they had provided ore for in the original setup. Therefore, another area was allotted for the purpose of supplying that additional vanadium. It was somewhat mixed up and somewhat complex, but that's the best I can give you in answering it.

Q. Well, let's start at the beginning of that again. Let's start at the beginning. The Dry Valley claims were first owned by United States Vanadium Corporation, is that a fact?

A. Yes. They had an agreement to purchase from Molybdenum Corporation of America, and the Dry Valley claims had been part [256] of our acquisitions in Utah which were planned back in 1938—and I think you read a letter here about and as part of a mill and processing plant which United States Vanadium Corporation was preparing to build in Monticello, Utah, and which United States Vanadium Corporation had acquired a plant site and the water rights-permission to use the water from the city of Monticello. We acquired the Dry Valley claims from Molybdenum Corporation of America as a result of a negotiation that was - and examination that started as early as 1938 — in fact, far beyond — before that I made an examination in '31 for the same purpose. And I had a subsequent examination made in 1938 by Mr. Aime of our corporation, who reported on the reserves of the Dry Valley claims.

I discussed with Mr. Van Fleet and I also discussed with the Molybdenum Corporation, in company with Mr. Van Fleet, the acquisitions of the Dry Valley claims as a part of another plant that we were planning to build at Monticello, Utah, which is very tributary to the Dry Valley claims. That was a part of a proposal that we had made to the Metal Reserve and the War Production Board about 1942. And the Dry Valley claims were tributary to Monticello where we had preparations made to build a 100-ton-a-day plant before the Molybdenum Corporation—the Vanadium Corporation of America had thought of or contemplated a plant there, according to our knowledge.

Therefore, our acquisition of the Dry Valley claims [257] from Molybdenum Corporation was carried on by discussion between myself and Mr. Van Fleet and the Molybdenum Corporation officials, and also as a companion and accompanying part of a discussion of properties that belonged to the same corporation, Molybdenum Corporation of America in the Gateway district, tributary to the Gateway alloys mill, and over the period of years that we had been in touch with this Molybdenum Corporation as a part of our program of U. S. Vanadium Corporation expansion into Utah, and I have letters that I have written to the Carbide recommending this in '38—

Q. Excuse me—Mr. Burwell, you did acquire the rights to those claims, is that correct?

A. That's correct.

- Q. It was about 1940, was it?
- A. We were—I think that was correct.
- Q. All right.

A. And we were mining those claims—started to mine those claims and had an ore purchase station near those claims on the main highway that goes between the railroad and Monticello, about six or eight miles distant from these mining claims, which were upon the cliffs in the valley just to the east—we had approximately 20, 25,000 tons that we had gathered there in a huge pile, by our scales, and sampling plant preparatory to moving them into Monticello for the vanadium plant. [258]

It's a long story.

Q. Well, let me ask you this-

The Court: Let's get down to this. When did you sell these claims to the other company?

The Witness: We didn't sell these claims to the other company, your Honor. The Vanadium Corporation of America, Mr. Bransome went to Mr. Haggerson and complained that we had bought these claims by the use of unfair information and demanded that these claims be turned over to the Vanadium Corporation of America because Mr. Van Fleet was a man of low repute and he had listened to a telephone conversation or heard about the price and that he had gone in and bought them at the time the Vanadium Corporation of America was considering buying them for some \$200,000. But the story was entirely false. But Mr. Haggerson, the President of U. S. Vanadium Corporation,

President of the Electro Metallurgical Company, listened to Mr. Haggerson and called Mr. Van Fleet up on the telephone and said that Ted Bransome was raising questions and feels that we should turn back to the V.C.A. these claims that we bought in Dry Valley and asked him to meet with Mr. Bransome and settle the matter.

Well, we had purchased the claims, we were operating the claims, we were in possession of the property involving thirty-five or forty mining claims. We had, of course, been in touch with those claims since 1931, before the V.C.A. was [259] ever in that field, before Mr. Bransome ever heard about that country.

Therefore, Mr. Bransome and Mr. Van Fleet nict, and I heard the story from Mr. Van Fleet—thise is what he told me of the meeting. He came back——

The Court: What finally happened then?

The Witness: We were ordered to turn over the properties to the Vanadium Corporation by Mr. Haggerson, give them back to the Vanadium Corporation, because they had decided—the Vanadium Corporation—that they needed the plant, and Mr. Haggerson said, "Let Mr. Bransome have the claims," and there was quite—

The Court: This is what was done?

The Witness: That is what was done.

The Court: You mined the claims on the same—under the same agreement that you had mined these others?

The Witness: We were—yes—well, when this happened, we were mining the claims for our own purpose, not for the agreement.

When this happened, we said, "Well, there is one way to do thin, they owe us vanadium for the Maggie C.; then if we have to give the claims up by order of Mr. Haggerson, we will go ahead and mine out the additional ore that we have coming from the Maggie C. agreement."

And so I negotiated with Mr. Kett an extension of the [260] Maggie C. agreement, but applying to Dry Valley, and when we got through mining that additional ore, I don't think they had very much luck getting back to the mines. I mean, we gutted the mines out as best we could and took the ore out and piled it up at the intersection of the road.

That isn't all the story, but that is all the answer to this.

Q. (By Mr. Alioto): Well, ultimately you did turn those claims over to the Vanadium Corporation of America, didn't you?

A. We were forced to, yes. We turned them over.

Q. You say you were forced to. You were forced to by whom?

A. Mr. Haggerson.

Q. Who was he at the time?

A. President of U. S. Vanadium Corporation. The Court: That was one of the subsidiaries?

The Witness: Of our group. In other words, this is an inter-company quarrel, your Honor. This is something that was going on in the family.

- Q. (By Mr. Alioto): When you say it was an "inter-company quarrel," you mean that you and Mr. Van Fleet wanted to keep the claims.
- A. Yes. We quarreled with Mr. Haggerson and we quarreled with them about turning these claims over to the Vanadium [261] Corporation.
- Q. In any event, Mr. Haggerson of the Union Carbide subsidiary—
  - A. Overruled us.
- Q. —directed you to give them to the Vanadium Corporation of America?
  - A. That is correct.
  - Q. And that was done?
  - A. That was done.
  - Q. In approximately what year was it done?
- A. Well, it was done prior to 1942. I think it was about 1941, because we mined for about six or eight months and that was prior to this 1942 letter.
- Q. Now I am going on to another subject, Mr. Holland. If you want that contract in evidence, I have no objection to putting it in for you.

Mr. Holland: I think that you should.

Mr. Alioto: I think that speaks for itself. You can put it in if you want.

Mr. Holland: It will give the picture.

Mr. Alioto: All right.

Mr. Holland: I want to.

Mr. Alioto: All right, if you want to. You will supply a copy to put in? We have no objection to it.

Mr. Holland: All right. We will get it. [262]

Mr. Alioto: All right, as soon as you have one available, I will put it in for you, Mr. Holland.

Q. Now, then, Mr. Burwell, I want to call your attention to another mining transaction with respect to the Cateway area. Do you recall that there was a little independent mill around Gateway called Gateway Alleys, Inc. in 1939-1940?

A. Oh, yes. Yes, I am very familiar with the Gateway Alloys Company area.

Q. Incidentally, was that a very good ore body around-Gateway? I want you to point Gateway out first so that the jurors might see generally where it is.

A. That's it right here. There has been about \$20,000,000 worth of vanadium uranium taken out of that area. Sure, it's a good area. [263]

A. Oh. my!

All the property was in the hands of an independent, was it not?

A. It was in the hands of the Molybdenum Corporation of America, and the independent had a lease on that from the Molybdenum Corporation where they were paying for the property at so many cents a pound of vanadium mined. They still had control of it, but the fee rested with the Molybdenum Corporation.

Q. Did there come a time when you had a discussion with Mr. Van Fleet about what the policy of your company would be with respect to this little independent mine?

A. Well, I had conversations with Mr. Van

Fleet, or he had conversations with me, and I think they are covered by letters that have already been introduced.

- Q. Did you agree on some plan of action with respect to that?
  - A. Well, I followed out instructions.
- Q. What were the instructions with respect to this little mine, a rather valuable mine that was owned by the independent?
- A. Well, to discourage them in any way we could. They offered the vanadium oxide to us for sale. I offered them 65c a pound for the oxide. We couldn't offer them any more. We didn't encourage them to produce any vanadium. We discouraged them. [264]
  - Q. Did you ever get your hands on that claim?
  - A. Oh, yes.
  - Q. How did that happen?
- A. We made an arrangement with the Molybdenum Corporation of America to sublease under Brown the claims that are in the cliffs and mountains around the Gateway alloy plant. The Gateway alloy plant was down in a canyon, and these mines are about 1500 or 2,000 feet above it. The roads and trails went up. Took a lease on these claims sublease, and paid the balance of the royalties into the Molybdenum Corporation, an on-the-ground deal and an overriding royalty to Harry Brown, and I think we moved out 12 to 15,000 pounds of easily accessible cheap ore from there to Urayan, a haul of about 65 miles. We constructed a road

up there and we cleaned out their accessible ore deposits.

Q. Wasn't that more expensive than the ore you could have mined from your own properties?

A. Yes, that ore cost us more than the ore we had immediately available at our own plant, because our own plant was located right here and our mines were within ten miles of that plant, and these mines were located at Gateway, and we had 45 to 65 miles of haul down a rough road here and, of course, that haul was costly.

Q. If that cost you more to get that ore rather than to get your own ore, why did you do that?

A. Well, we wanted to keep another vanadium operation from getting started.

Mr. Holland: Do you want these on Dry Valley, Mr. Alioto, the Dry Valley agreements?

Mr. Alioto: Yes.

Q. Whose instructions were you operating under when you did that?

A. I was operating under the instruction of Mr. Van Fleet, from the letters you have already introduced.

Q. (By the Court): Was that during the War!

A. No, this is prior to the War, your Honor. This was prior to the War.

Q. When was it?

 I think this was 1939, if I am not mistaken, 1939.

Q. (By Mr. Alioto): As a matter of fact, that mill did go broke, didn't it, about 1940?

A. It did.

Mr. Alioto: Now, as an accommodation to my fine friend from Denver, I would like to offer the contracts he has handed me as exhibits next in order.

Mr. Holland: Thank you very much, Mr. Alioto.
Mr. Alioto: That is all right. I am glad to do
it in this connection.

(The documents referred to were thereupon received in evidence and marked Plaintiff's Exhibit 46.)

[See Book of Exhibits.]

- Q. (By Mr. Alioto): In 1946, Mr. Van Fleet was the Chairman of the Board of the United States Vanadium Corporation, was he not?
  - A. 1946? He was chairman just before he died.
  - Q. And you were a director?
  - A. I was a director and so was he.
  - Q. And a vice-president?
  - A. That is right.
  - Q. And the head man on mining operations?
  - A. That is right.
- Q. Did there come a time when you had a discussion with Mr. Van Fleet about removing certain files from the United States Vanadium Corporation?

Mr. Archer: Your Honor, I object to this. This was long before this lawsuit was filed and could have no possible relevancy here. The files were all produced in Denver and I do not see what they have to do with this lawsuit.

Mr. Alioto: It was seven years after the plaintiff went into business—eight years after the plaintiff went into business, when he was still trying to get into it.

The Court: What files are you talking about?

Mr. Alioto: Some of the files that have been presented in this courtroom, among others. I offer to prove, if your Honor please, and I made a statement already in my opening statement, that there was an attempt to destroy certain [267] files and that certain of them were preserved because of the belief that the uranium production was going to be inhibited by reason of being tied to the vanadium sales and certain agreements in connection with vanadium sales.

The Court: Go ahead and ask your question.

Q. (By Mr. Alioto): Did you have such a discussion with Mr. Van Fleet?

A. Yes, I did.

Mr. Holland: This is not offered against the Vanadium Corporation?

Mr. Alioto: No, it is offered against the Union Carbide, Mr. Holland.

Mr. Holland: Thank you.

Mr. Alioto: I thought you said "good." I am sorry.

Mr. Holland: I didn't hear you.

Q. (By Mr. Alioto): Where did that discussion take place, if you recall, Mr. Burwell?

A. Las Vegas, Nevada, at the El Rancho Vegas Hotel.

- Q. Prior to that time, did you and Mr. Van Fleet have a controversy with Mr. Priestley about vanadium production or your uranium production.
- A. I had a conversation at this directors' meeting that I think you asked me questions about-officials of Carbide. That was in 1946, too, [268]
- Q. Who was present at this meeting in Las Vegas besides you and Mr. Van Fleet?
- A. Just myself, Mr. Van Fleet, and his wife was there.
  - Q. Was Mr. Van Fleet sick at the time!
  - A. Yes.
- Q. Would you be good enough to state the substance of that conversation, Mr. Burwell?
- A. Again, I will have to give you a statement of what led up or it wouldn't make sense. May I do so?
  - Q. If you will state it factually, sir.
- A. Mr. Van Fleet asked me to meet him in Las Vegas, Nevada. He had had an operation for cancer, and he had picked up his wife in San Francisco, visiting her mother, and was going through to Tucson, and he wanted me to meet him there, wired me, and I came in from the East and met him.

He had been badly cut up under surgery, and he told me this. He said, "I wanted you to meet me here today, Blair. I don't feel that I have long to live. I have a number of records of the vanadium case, the operations of the Union Carbide which I have taken to my apartment. They are

copies of letters. You have seen them all, and I have put them in a briefease down in my apartment and I told Mrs. Orr"—who was the maid who cleaned the apartment. "She lives a couple of floors below and keeps the key, because there is nobody else there. In case I die, I want you to take those records—those records [269] are to be sent out to you, and I want you to do this with them and for this reason."

He reviewed the story of the uranium field and the vanadium business. He reviewed the War period and the Manhattan district period, which was just over.

He said, "I feel that the security of the United States depends upon getting a supply of vanadiumuranium in the future from the Colorado Plateau. and if the vanadium-if it is channeled through the vanadium industry as it has been in the past. and which I believe is going to be done, we will only get 300,000 pounds of uranium a year, and if we do not have more than 300,000 pounds a year of uranium, we are in peril in the United States in the future. The issue has become bigger than the corporation. The issues in this thing are beyond corporate interests. And while I have been a loyal carbide man for 30 years, I have come to the conclusion that Mr. Priestley and Mr. Remmers and Mr. Haggerson are, unfortunately, too unaware of the essentials of producing uranium, and that they may prevail upon the Atomic Energy Commission, which is just being formed, to channel the vana-

dium—the uranium production of this Colorade Plateau through the vanadium interests, in tune with vanadium sales on the markets, and the life and death of our country, I feel, rests in opening the reserves of uranium which we know exist and of which we have made surveys. [270]

"Now, the situation has gone beyond mere corporate interest, and I am in the position of telling you that if you think that the security of the United States demands that this program be stopped and this perversion of our resources should be stopped, you take these records and give them to the Department of Justice or you do anything that you can to stop any more of this monkey business."

He said, "I will probably be misunderstood, why I should do these things. Some of these letters more or less damn me for being partisan to the corporation, sure, as long as the corporation interest and its financial interests are involved, that position I would take, that nobody would ever hear anything outside of the corporation about it, but you take these records, and when I die and you think that the situation is that Priestley and Remmers will forget and overlook the tremendous amount of research reports, proposals to a general gross of the Manhattan district and be so careless of the reputation of Union Carbide that they would expose that company to censure, you would have to take them and give them to the Department of Justice or do what you need.

"I feel," he said, "that I would fail in my duty

as a Carbide official if I expose this corporation to the danger of being blamed in the future for not taking care of its national opportunities."

Q. Did he then hand you certain documents!

Mr. Archer: Your Honor, I move to strike this testimony. The testimony obviously involves the question of whether we produced enough uranium for the Atomic Energy Commission. We certainly can not try that in this lawsuit even if we wanted to. It concerns a period after 1946, and this is something which is obviously classified, and we can't try in this lawsuit.

Mr. Alioto: If your Honor please, the testimony is already in this record——

The Court: The objection is sustained. It is immaterial. It has nothing to do with the issues in this case. I do not know how much you are going to cover in territory in this case.

Mr. Alioto: We are about to finish, your Honor. The Court: If we can get down to the lawsuit and try the lawsuit itself, the Court would feel better about it

Mr. Alioto: We were about to finish, if the Court please, by handing him some of those documents.

The Court: The objection is sustained and the jury will disregard the statement. We will recess at this time until 10:00 o'clock tomorrow morning.

(Recess until 10:00 o'clock a.m. tomorrow, Wednesday, June 4, 1958.) [272]

June 4, 1958, 10:00 o'clock a.m.

The Clerk: Continental Ore Company versus Union Carbide and Carbon Corporation, et al. further trial.

Mr. Holland: Ready.

Mr. Alioto: Ready.

## BLAIR BURWELL.

a witness on behalf of the plaintiffs, having been previously duly sworn, resumed the stand and testified further as follows:

## Direct Examination—(Continued)

(By Mr. Alioto): Now, Mr. Burwell, I want to conclude this examination by directing your attention to certain independent mills that operated on the Colorado Plateau for a short period of time and that figured in the supply to the Continental Ore Company.

Did you know an oxide mill on the Colorado Plateau called the Mesa Vanadium Mill?

A. Yes. I did.

Q. Could you, by reference to that map that is before you—and we could turn it so that the Jury in back may see it-could you by reference to that map locate the approximate location of the Mesa Vanadium Mill?

A. Yes. It's in the same general uranium district just where my finger is, called Disappointment Creek.

- Q. Disappointment Creek is in that area that is called [274] the Slick Rock area?
  - A. That's right.
  - Q. On the map there.

Do you recall who it was that was operating the Mesa Vanadium Company?

- A. It was a group of Grand Junction businessmen, oh, Mr. Claybaugh is one, and an attorney—I don't recall his name—a group of local businessmen.
- Q. Do you recall approximately when it was that that mill was started in that area?
  - A. I think about 1939, somewhere in there.
- Q. At that period of time, Mr. Burwell, there was a market for vanadium oxide in export, was there not?
  - A. I believe that's correct.
- Q. And do you recall what the export price of vanadium oxide was at that time from these independent mills?
- A. That I do not know precisely. Approximately \$1.10 a pound, \$1.00 to \$1.10 a pound.
- Q. Do you recall what your price was to the oxide mills at the time for vanadium oxide?
  - A. \$1.10.
- Q. Did you have a 65-cent price in 1939 for any of these mills?

Mr. Archer: I object to that as leading. He already testified to \$1.10. [275]

The Court: Sustained. Let the witness testify.

The Witness: Repeat the question, please.

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Q. (By Mr. Alioto): Well, that question is withdrawn.

What is your best recollection as to the price paid by the United States Vanadium Corporation for vanadium oxide in August of 4939?

Mr. Archer: I object, your Honor. It has been asked and answered.

Mr. Alioto: Let him answer.

The Court: Repeat your question, please,

- Q. (By Mr. Alioto): Give us your best recollection now of the price paid by the United States Vanadium Corporation under your general duties to the independent mills for vanadium exide in 1939.
  - A. You mean for red cake?
  - Q. Let's take the red cake first.
- A. Anywhere from 50 to 65 cents—it was no fixed price, simply a matter of negotiation.
- Q. All right. And you carried on those negotiations, didn't you?
  - A. That's correct.
- Q. Now, did there come a time when you decided, in connection with your duties, to do something about this Mesa Vanagium Mill?
  - A. That's correct. [276]
  - Q. And what was it that you did?
- A. We took over the operation of the Mesa Vanadium Mill; run a test operation on it for a short period of time; shut it down and used it as an ore-buying station; purchased it from the—

Mr. Holland: That evidence is not offered against the Vanadium Corporation, I take it!

Mr. Alioto: No, at the present time it is being offered only as against Union Carbide.

- Q. And do you recall when it was that you shut it down? A. Not exactly.
  - Q. Did you need a mill at that time?
- A. No.
  - Q. Mr. Burwell?
  - A. No, we did not need a mill at that time.
- Q. If you didn't need a mill, why did you take it over and shut it down?
- A. We needed an ore-buying station at that time. We didn't need the mill.
- Q. Why did you buy the mill if you didn't need it?
  - A. To keep it out of production.
- Q. Do you know another little independent mill that started around 1940 at Loma?
- A. Yes, I do.
  - Q. Do you know a man named Morrison!
  - A. I don't recall.
- Q. Would you be good enough to indicate on that map the approximate location of the Loma Mill?
- A. Approximately at this point on the Colorado River, just west and north of Grand Junction.
- Q. Is that called the Yellow Cat Mining District area?

  A. No.
  - Q. What is that called?

A. It's in the Grand Junction Valley. It's approximately 90 miles east of the Yellow Cat area.

Q. Did you hear in the course of your duties as an officer of United States Vanadium Corporation that some independent was trying to start a mill up there?

A. At Loma?

Q. Yes.

A. Oh, yes, I knew that they were starting a mill at Loma.

Q. Did you do anything about that? Let me ask this: Prior to the time that you heard about this mill was United States Vanadium purchasing ore in the area of that mill?

A. No. Prior to the starting of that mill we were not purchasing ore in the area, any areas close to this mill.

Q. Well, then, after the mill started, did you start buying ore there?

A. Where do you mean? In the area tributary to the mill?

Q. Yes.

Mr. Archer: Could we have the date of this!

Q. (By Mr. Alioto): What year was this?

A. It would be somewhere around '41 or '40'41. I'm not too sure of the date.

Mr. Holland: Mr. Alioto, the testimony with respect to the Loma mill is offered only against Carbide?

Mr. Alioto: Yes, at this point, Mr. Holland. that is correct.

Q. The pending question is: After you heard

about somebody wanting to start this mill in that area, did you take any steps about buying ore in the area that was tributary to the mill?

A. Why, we started an ore-buying station in the area at Thompsons, Utah, which is directly west of it on the railroad, and from which the Loma mill was obtaining its ore supply.

Q. And what was-

A. That's the Yellew Cat area.

Q. Did you need the ore at that time?

A. No.

Q. Why did you set up that ore-buying station right by this mill?

A. Well, there were two reasons; one was to, of course, to acquire the ore for future needs of the corporation, and we also purchased the ore to keep it away from the Loma mill.

Q. Did you pay more for that ore than you paid for ore [279] in the vicinity of your Uravan plant?

A. No. We paid the same price.

Q. Did you have to haul it some considerable—a great distance—a greater distance than ordinarily would be the case?

A. Yes. We had to haul it approximately 150 miles compared to about 7 or 8 miles.

Q. So that ore cost you more, did it not?

A. That's right.

Q. Were you under some instructions to keep that ore away from this little mill?

Mr. Archer: I object to that as leading.

The Court: Sustained. Leading and suggestive.

- Q. (By Mr. Alioto): You stated in your testimony that you bought that ore—one of the reasons for buying that ore was to keep it away from this mill?

  A. That's right.
- Q. Did you succeed in keeping it away from the mill?

A. The mill closed down for lack of ore.

The Court: Well, could the mill purchase ore the same as you did? A. They could.

The Court: At the same price?

A. They could.

Q. (By Mr. Alioto): Did you outbid them for any of [280] that ore?

Mr. Archer: I object to that as leading.

Mr. Alioto: All right. I was trying to follow up the Court's question.

Q. Let me ask it this way-

The Court: He said the same price.

- Q. (By Mr. Alioto): What was the difference, approximately, to you in buying that ore from that station, and transporting it to Uravan, as against buying the ore in the vicinity of Uravan?
- A. The difference was the cost of the haul from that point to Uravan.
- Q. And that was a haul of 150 miles, did you say?

  A. Approximately.
- Q. All right. How much did that haul cost. approximately?
- A. Five cents a ton-mile—seven dollars and a half a ton.

- Q. Was there any hauling allowance of any type made to the miners in that area from that ore-buying station of yours?

  A. No.
- Q. Do you recall the approximate price you paid for that ore?
- A. As I told you before, we paid approximately the same price in Uravan, and to the best of my recollection it was somewhere around 20, 21 cents.
- Q. Now, since—well, I think you already have given the reason for your establishing the ore-buying station there.

Now, I want to direct your attention to—we spoke about the Gateway situation yesterday. I think we probably covered it.

Incidentally, do you know the name of the man who was the founder, the original founder of the Vanadium Corporation of America?

- A. Oh, yes.
- Q. What was his name?
- A. J. J. Flannery. He was the founder of the whole vanadium business in the United States.
  - Q. And how did you come to know him?
- A. Well, I knew him in 1920. I was a young agent around the school. He was the owner of the Standard Chemical Company, which was purchased later by the Union Carbide and became the Uravan plant. I knew him when he was visiting the operations at Uravan.
  - Q. Did you-
- A. They called it the Joe Junior Mill-that was for his son Joe Junior Flannery.

- Q. Did you work for Mr. Flannery!
- A. I worked for Mr. Flannery.
- Q. For how long? A. Two years. [282]
- Q. And Mr. Flannery was the man who founded the predecessor?company to the Vanadium Corporation of America?
- A. Mr. Flannery had founded the American Vanadium Company.
- Q. Which was later purchased by the Vanadium Corporation of America, was it?
  - A. That was my understanding.
- Q. Did Mr. Flannery ever tell you how much money he started with in the vanadium business!

Mr. Archer: I object to that, your Honor. This is long before 1938.

The Court: Yes, sustained.

Mr. Alioto: I understand, if your Honor please, that there has been some testimony here about how much money you need to get into the vanadium business.

Mr. Holland: The cost of getting into the business in 1920 has no relation to the cost of getting in it in 1938.

Mr. Alioto: I think, if your Honor please, that is a relevant—

The Court: The Court has ruled on it.

Mr. Alioto: All right, if your Honor please.

I am aware of the Court's ruling with respect to the matter of not introducing material prior to 1938. However, I am also aware of the fact that I am under some obligation to make a record on

it because of our position that the testimony now makes relevant the precise nature of the agreement which [283] existed in 1938, and we say that the precise nature of that agreement is set out very specifically in documents written by the leading officers of the United States Vanadium Corporation and of the Vanadium Corporation of America. One of those documents, of course, is in the MacQuigg report, of which we had some conversation about, and I would like to lay a foundation for that matter, if your Honor please.

Q. Mr. Burwell, I show you a copy of a document which I would respectfully ask that the Court mark it for identification.

The Clerk: Plaintiffs' 47.

(Whereupon the document referred to was marked Plaintiffs' Exhibit No. 47 for identification.)

Mr. Holland: Are you going to make an offer of proof?

Mr. Alioto: No.

Q. Mr. Burwell, would you be good enough to look at that document and then, without revealing its contents, just state generally what it is.

A. Yes. This is a report on vanadium by one of the metallurgists for the Union Carbide and Carbon Research Corporation. It pertains to——

Mr. Holland: You said without revealing what was in it.

The Court: Don't state the substance of it. What is the date of it?

Mr. Alioto: I think the date you will find in that first page at the bottom, Mr. Burwell.

A. It is June 1935.

- Q. Would you be good enough, Mr. Burwell, to identify the Union Carbide & Carbon Research Corporation? What is it?
  - A. May I look at your chart, please?
- Q. It doesn't appear directly on the chart, but does it have some relationship to the companies that do appear on the chart, Plaintiffs' Exhibit 27 for identification?
- A. It is a research organization which is operated by the Union Carbide & Carbon Corporation, and particularly under the jurisdiction and management of the Metallurgical Company.
- Q. (By the Court): What is a research corporation?
- A. A research corporation, your Honor, is a group, or a manner of organizing a group of research people in a corporation to do research on problems of metallurgy, or problems of making new products, or problems of marketing, and often those research groups are contained in a corporate organization for the purpose of financing, or for the purposes peculiar to their—
- Q. Was it unusual for these companies that were engaged in these mining operations to engage mercey extensive research investigation of the material and the manner of manufacture and the future of the development?
  - A. No, your Honor; it is the usual thing.

Q. (By Mr. Alioto): Did there come a time when the officials of the [285] United States Vanadium Corporation and Electro Met delegated to the research organization of Carbide the task of making a study of the vanadium problem as it existed in 1935? A. They did.

Mr. Archer: I object to the question, your Honor, not only on the time basis, but it is leading and suggestive.

The Court: The objection is sustained and the jury will disregard the answer.

Q. (By Mr. Alioto): Would you tell us with respect to the document which has now been marked Plaintiffs' Exhibit 47-D for identification, whether that document ever came up for discussion among the leading officials of the United States Vanadium Corporation and the Electro Metallurgical Company?

Mr. Archer: I object, your Honor.

The Court: That is prior to 1938?

Q. (By Mr. Alioto): Well, was it discussed at any time after January 1, 1938?

A. Yes, it was discussed in 1938, it was discussed in 1939, it was discussed in 1940, 1941, 1942, 1943, and 1944.

Q. What was the nature of the discussion that took place about this document after January 1, 1938?

Mr. Archer: I object, your Honor. I think we ought to establish who was present, and that sort of thing. [286]

Mr. Alioto: We are going to do that.

Mr. Holland: If the Court please, Mr. Alioto, who never gives up, is now attempting, through conversations subsequent to 1938, to go into this whole pre-1938 and 1939 matter.

The Court: The Court has ruled on this, that transactions prior to 1938 are incompetent.

Mr. Alioto: Yes, if your Honor please.

The Court: The plaintiff in this case, according to your allegations and your proof, started in business in 1938.

Mr. Alioto: That is correct.

The Court: The gist of this lawsuit is really not constitution of the monopoly, but it is whether or not this plaintiff was damaged because of these various defendants, and, of course, that can only be after he went into business. Now, what transpired when he was still in Europe is incompetent, and the Court holds that all of these transactions prior to 1938 are incompetent.

Mr. Alioto: Yes, I am aware of the Court's ruling. As I pointed out just before I started my inquiry, I recognize that. But now, if your Honor please, I would like to show through this witness that there was an agreement in existence in 1938 and 1939 which directly impinged upon and damaged this plaintiff. [287]

The Court: We are not going into what transpired before 1938.

Mr. Alioto: My question asks him for discussions after January 1, 1938.

The Court: I understand. The objection will be sustained. I just don't want to go into it at all. You are going into it in another way. That is directly opposite to the Court's ruling.

Mr. Alioto: No, I do not mean to be, if your Honor please. I think the Court knows that I have not been otherwise than deferential to the Court. However, in carrying out what I conceive to be the things that have to be done here in order to preserve this record, it is my understanding of the law, from United States versus Standard Oil, for example, that if you prove an existing agreement, say in 1939, once you have established that there is such an agreement in 1939, that thereafter you may show the nature of that agreement by its origin. That is the basis I am talking about.

The Court: You may show any transactions that took place after 1938, but you cannot base your question on what occurred prior to that time. The Court has ruled on that.

Mr. Alioto: I understand that, your Honor, but so the Court will not think I am being anything but respectful, I want to point out—whether I am correct in my view—I want [288] to establish the existence of an agreement in 1938.

The Court: What you are trying to do is to show an agreement that existed long years before 1938, and that was discussed at a later date.

Mr. Alioto: No, that is the opposite of what I am trying to do, if your Honor please. What I

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(Testimony of Blair Burwell.) am trying to do is to show that there was this agreement in 1938. That is the first step.

Now, I think the Court has heard enough evidence from this witness to know that there was some kind of collaboration between these two defendants. But quite aside from that, what I want to show is that there was this agreement. Then the question is, What is the nature of this agreement?

The only way you can know the nature of this agreement, if it started in 1935 and continued through 1938,——

The Court: The Court has ruled on the point. Let us go to something else. You may have an exception.

Mr. Alioto: May I, so I won't have to take up the time of the Court and the jury further, at this time make an offer of proof along these lines, if your Honor please?

Mr. Holland: I believe the offer of proof should be made in chambers.

The Court: You can make a general statement, but not the contents, now.

Mr. Alioto: I do not intend to go into the [289] contents, if your Honor please. I intend to make a general statement, and I will hand the document to Mr. Holland, so there won't be any question about my revealing the contents of it.

Mr. Holland: I know Mr. Alioto's general statements, and I think we are precluded, of course, from going prior to 1938. This was all taken up in the other case to which I referred in my open-

ing statement. Your Honor wanted to limit the proof. Now, I believe if you want to limit the proof, that this offer of proof should be made in the absence of the jury, your Honor.

Mr. Alioto: With respect to Mr. Holland's statement, if your Honor please, documents prior to 1938 were admitted in the other case.

Mr. Holland: That is exactly what I said. The whole thing was brought out in that <u>case</u>, and we were acquitted.

Mr. Alioto: Acquitted after a ten-year delay, yes.

The Court: Your offer of proof is as to the contents of agreements made prior to 1938?

Mr. Alioto: No, if your Honor please, it is not. The Court: What is it?

Mr. Alioto: My offer of proof is to prove the nature of the agreements that existed from January 1, 1938, to [290] the date of the filing of this complaint. That is all I offer to prove. And I offer to prove that from documents which were executed prior to 1938, but which in detail set out the precise agreement which existed from 1938 to 1947.

May I give you this example, if your Honor please: Let us assume I make a lease, an ordinary lease,—

The Court: Your offer of proof is denied. Exception allowed. We are not going back into—you will get back to '49 if we go very much further.

Mr. Alioto: If the Court will indulge me 30 more seconds to complete the record, I would at

this time formally offer into evidence that document dated June 19, 1935, which has been marked Exhibit 47-D for identification.

The Court: Very well.

Mr. Alioto: May we have the nature of the objection to the document? Is there any question about authenticity? I do not want any question about that.

Mr. Holland: No question of authenticity. The nature of our objection was made before the case started, and the Court ruled at that time.

The Court: The objection will be sustained. Exception allowed.

Mr. Alioto: I do not believe, if your Honor please, with deference, that at this stage of the proceeding the record shows the nature of the objection being made by Mr. Holland [291] and Mr. Archer.

Mr. Holland: I think the record shows before the case ever started we made an objection in your chambers. We filed a pre-trial brief with the Court. I do not see any point in dragging this on.

Mr. Alioto: There was no record made in chambers, if your Honor please.

The Court: The objection is sustained. Exception allowed, Proceed.

Mr. Alioto: May I have a series of documents referring to this report written by the chief managing agent of the United States Vanadium Corporation—I would like to have these marked as our exhibit next in order, and I would respectfully re-

quest that they be marked as a group, if you would, sir. They are being offered at this point solely against the Union Carbide Company. There was no objection by Union Carbide Company to the previous exhibit, which was not offered against the Vanadium Corporation of America, but it was the Vanadium Corporation of America that objected. So we have a record here that is very much upset, I think, if your Honor please.

Mr. Archer: I think the Court stated at the beginning of the trial an objection made by one defendant would accrue to the other unless I disavowed it, and I would state my objection to these on the same basis as in the memorandum, [292] and on the basis they are incompetent, irrelevant and immaterial.

The Court: The objection will be sustained.

Mr. Alioto: When you say they are incompetent, I take it, Mr. Archer, you are not objecting on the ground of authenticity?

Mr. Archer: I take it they are all ones I have seen.

Mr. Alioto: Yes, they are the ones about which we had the pre-trial stipulation. In other words, the genuineness of the document set forth in the exhibit which is now marked 48 for identification is conceded, Mr. Archer?

Mr. Archer: Well, if you tell me they are the ones I looked at—

Mr. Alioto: You look at them. They concern

Mr. Van Fleet, Mr. Burwell, and the other folks like that.

Mr. Holland: I have not seen the documents, but I will concede it.

Mr. Archer: Yes.

Mr. Alioto: So we will offer that in evidence, if your Honor please. I understand the Court has rejected that evidence.

The Court: The objection is sustained and an exception is allowed.

Mr. Alioto: In order further to make the record [293] on this I now offer in evidence and ask to be marked for identification at the present time, only, documents of both companies, Vanadium Corporation of America and Union Carbide, written prior to January 1, 1938, but which evidence joint communication between the companies respecting agreements which we maintain were in effect in 1938, as this witness has testified. After I get these back——

Mr. Holland: I object to it as incompetent, irrelevant and immaterial.

Mr. Archer: Same objection, your Honor.

The Court: Objection sustained.

Mr. Alioto: Would the Court have any objection if we have these marked as one group?

The Court: You may do that.

(The documents referred to were marked Plaintiffs' Exhibit No. 48 for identification, as a group.)

Mr. Alioto: I think I simply asked that they be marked for identification at this point.

Mr. Neaher: Mr. Alioto, may I suggest that you mark as one group the Union Carbide documents, and keep the V.C.A. separately?

Mr. Alioto: I have no objection to doing that. We ask to be marked for identification, if your Honor please, documents of Union Carbide, being letters dated March 9, 1938, March 31, 1937, November 3, 1937, and December 29, 1936. [294] I will ask that these documents of Union Carbide, between officers such as Mr. Van Fleet, Mr. Gormely and Mr. Burwell, be marked for identification as a plaintiffs' exhibit—only for identification at this point.

(The documents referred to marked as Plaintiffs' Exhibit No. 49 for identification.)

Mr. Alioto: We now offer these documents which have been marked 49 for identification into evidence.

Mr. Holland: Objection. The objection has already been made.

Mr. Archer: Same objection.

The Court: Are you offering them for identification?

Mr. Alioto: No,-

The Court: The objection is sustained. Exception allowed.

Mr. Alioto: I now ask that there be marked documents of the Vanadium Corporation of America, being a communication between the secretary,

Mr. P. J. Gibbons, to Mr. B. B. Bransome, president, Mr. Charles Reece, Mr. Davis, Mr. King, Mr. Dunne and Mr. Gibbons. It is a memorandum on a conference held in the New York office. I ask that be marked for identification together with a document entitled "Conference on Raw Material Situation, Held in New York Office," between the following gentlemen: Mr. Bransome, Mr. Davis, [295] Mr. Reece and Mr. Gibbons, with the report on this conference by Mr. Gibbons dated February 9, 1937. I will ask that that be marked for identification together with the other document of the Vanadium Corporation of America.

(The documents referred to were re-marked as Plaintiffs' Exhibit No. 50 for identification.)

Mr. Alioto: We will now offer these documents into evidence, if your Honor please.

Mr. Holland: To which we object on the usual grounds.

The Court: Objection. Exception allowed.

Mr. Alioto: I would now like to offer a series of documents, if your Honor please, by both companies, which I will offer separately, that relate to direct negotiations of the two companies involved, they being dated, this group, the Union Carbide group, March 25, 1936, a letter from Mr. Van Fleet to Messrs. Gormely, Haggerson, Sneath and Priestley; a letter dated March 25, 1936, marked "Vanadium Situation, Vanadium Corporation of America," from Mr. Van Fleet to Mr. Gormely, Mr. Haggerson, Mr. Sneath and Mr. Priestley; and a

letter dated March 25, 1936, marked "Vanadium Situation, Vanadium Corporation of America," from Mr. Van Fleet to Mr. Gormely, Mr. Haggerson, Mr. Sneath and Mr. Priestley.

I will ask that these Union Carbide documents, about which I understand that there is no question of authenticity, [296] Mr. Archer, be marked for identification at this point.

(The documents referred to were marked Plaintiffs' Exhibit No. 51 for identification.)

Mr. Alioto: We will offer Plaintiffs' 51 into evidence, if your Honor please.

Mr. Archer: To which we object on the grounds stated in the memorandum filed, and that they are incompetent, irrelevant and immaterial.

The Court: Objection sustained, Exception allowed.

Mr. Alioto: I respectfully ask the clerk if he will be good enough to take these documents and mark them for identification, if it is all right with the Court.

(The documents referred to were marked Plaintiffs' Exhibit No. 52 for identification.)

Mr. Alioto: These documents are documents of the Vanadium Corporation of America about which, Mr. Holland, I take it there is no question of authenticity?

Mr. Holland: Correct.

Mr. Alioto: And they relate, if your Honor please, to joint conferences between personnel of Vanadium Corporation of America and the Union

Carbide Corporation. They are dated November 6, 1935, November 13, 1935, November 15, 1935, July 10, 1934, July 6, 1934, March 13, 1934, April 3, 1935, April 2, 1935, it being the contention of the plaintiff that these documents set forth the nature of the agreement existing from [297] 1938 to 1949. We will offer them for that purpose.

Mr. Holland: To which we object on the usual grounds, your Honor.

The Court: Objection sustained and exception allowed.

Mr. Alioto: I am about to finish this very shortly, your Honor. I am twing to get it down as hurriedly as possible. Tother two minutes should do it.

I now would ask that this next series of documents be marked for identification.

Again, Mr. Archer, I take it there is no question about the authenticity and genuineness of these documents, and there is no objection based upon foundation. I am sure of that. I do not think there is.

Mr. Archer: There is no question of the authenticity of those.

Mr. Alioto: I mean where these things are signed, for example, by the president and the vice-president of the companies.

Mr. Archer: Oh, yes, those are the signatures of the men they purport to be, and if there are no copies of those signatures I will stipulate that they all signed them.

Mr. Alioto: These documents, if your Honor please, are documents of the Union Carbide Company, and are interoffice memoranda and letters involving the top officials of [298] these companies with respect to the matter of vanadium, and we offer them into evidence at this time for the purpose of establishing the origin of the conspiracy claimed by the plaintiff in 1933, which the plaintiff contends existed from January 1, 1938, through 1949, and these documents we believe show the nature of the combination between these defendants which existed in 1938, 1939, 1940, and through 1949. We will offer these into evidence at this point, if your Honor please.

Mr. Archer: Same objection, your Honor.

The Court: Objection sustained and exception allowed.

(The documents referred to were marked Plaintiffs' Exhibit No. 53 for identification.)

Mr. Alioto: We offer next a set of minutes of the Vanadium Corporation of America dated the 4th day of April, 1943.

(The minutes referred to were marked Plaintiffs' Exhibit No. 54 for identification.)

Mr. Alioto: We will now offer this in evidence, if your Honor please, to prove the nature of the combination existing from 1938 to 1949, and also to show the origin of the combination which existed during those years.

Mr. Holland: Same objection, your Honor.

The Court: Objection sustained, Exception allowed, [299]

Mr. Alioto: To complete the record on the examination of this witness, if your Honor please, I would like to offer at this point two documents of the Vanadium Corporation of America dated after January 1, 1938, and relating to the Gateway Alloys Company, around Gateway, about which this witness testified yesterday.

The Court: What are the dates:

Mr. Alioto: I will give those to your Honor.

Mr. Holland: No objection from Vanadium Corporation.

Mr. Alioto: The dates, if your Honor please, are October 22, 1939, and October 3, 1938, and you recall the witness gave some testimony about this Gateway Alloys Company in the years 1938 and 1939. These are documents from the other company relating to the same matter.

We will offer these two documents in evidence, and respectfully ask the clerk to mark them as one exhibit.

(The documents referred to were marked Plaintiffs' Exhibit No. 55 for identification.)

Mr. Alioto: They are offered against the Vanadium Corporation of America at this time.

Mr. Archer: I would object, your Honor. Some of them refer to their comments about our company. I am sure I can understand why Mr. Holland does not object to their calling us names, but I

(Testimony of Blair Burwell.) would object to their going into [300] evidence on any basis.

The Court: What are they?

Mr. Alioto: If your Honor please, the Brown mentioned there is the Brown connected with the Gateway Alloys about which the Court heard testimony yesterday. [300-A]

Mr. Archer: There is only one to which I am objecting and I don't know which one it is on.

Mr. Alioto: I think it is the second one you are objecting to.

Mr. Archer: They are both marked as one exhibit.

Mr. Alioto: Well, I will segregate the exhibits if there is going to be an objection to one only.

The Court: The objection will be overruled. Exception allowed. I don't see the materiality.

Mr. Alioto: Well, we will tie it in later on. This is one of the sources of supply where the plaintiff company that devolved later on, if your Honor please. It will be tied up.

The Clerk: Plaintiffs' Exhibit 55 admitted and filed into evidence.

(The memo, October 22, 1939, from Robert Sterling to Frederick F. Kett, marked in evidence Plaintiffs' Exhibit No. 55.)

[See Book of Exhibits.]

Mr. Alioto: We have no other questions at this point, if your Honor please, but I would like the opportunity, in chambers, as Mr. Holland suggests, to make a rather extensive offer of proof on addi-

tional testimony that this witness would give on the combination charged here covering the period prior to 1938; it being our contention that this detailed offer of proof will show on its face that it relates to the same [301] agreement that was in existence between '38 and '39 and explains the nature of the component parts of that agreement, So I would like to conclude my examination of the witness now and respectfully request the Court to give me that opportunity to make an extended offer of proof, for the record, in chambers or any other place the Court desires.

The Court: Very well.

Mr. Holland: Do you want these (indicating documents)? We object to this.

Mr. Alioto: We will offer into evidence the document that I have just received from-that I have just handed to Mr. Holland for his inspection -being documents dated June 26, 1940, and September 12, 1939.

Mr. Holland: To which we have no objection, your Honor.

The Court: Very well.

The Clerk: Plaintiffs' 56 admitted and filed into evidence.

(Memo, September 12, 1939, from Frederick F. Kett to Robert Sterling, received into evidence and marked Plaintiffs' Exhibit No. 56.)

[See Book of Exhibits.]

Mr. Alioto: Now, this document, if your Honor please, the Vanadium Corporation of America, en-

titled "Vanadium Bearing Raw Material," is a breakdown of Peruvian ore and its uses and certain processes concerning it for the years '35 to [302] '39, so that there are two years in the scope of your Honor's ruling and three years out of it, but it is one document, and I don't know how it can be segregated, but I think if your Honor looks at the nature of the document that it will—

Mr. Holland: We object to anything prior to '38. If you want to confine this case to '38 on—because that is a summary of what happened from '35 to '40.

Mr. Alioto: To '40. See, it includes some years in and some years are out, but it is a summary about uses, if your Honor please, and statistics——Mr. Holland: Statistics for those years that your Honor has ruled are not material to this case.

The Court: Well, it may be admitted, but excluded therefrom will be all reference to prior to 1938.

Mr. Alioto: All right.

The Clerk: Plaintiffs' Exhibit 57 admitted and filed into evidence.

(Document "Vanadium Bearing Raw Materials" 1935-1939, received in evidence and marked Plaintiffs' Exhibit No. 57.)

Mr. Alioto: (Following comment between counsel outside of hearing of reporter) I think perhaps we can agree on a process of doing that, Mr. Holland. I don't see any difficulty on that.

I take it that my concluding the direct exami-

nation is subject to my right to make the offer of proof? [303]

The Court: You may recall this witness for other purposes. Very well.

## Cross-Examination

- Q. (By Mr. Archer): Mr. Burwell, I believe that it is your testimony that in 1938 at Uravan the United States Vanadium Corporation had approximately \$1,250,000 invested in fixed assets in the vanadium oxide plant, is that not correct?
  - A. I think that's approximate.
- Q. And approximately \$1,400,000 invested in mines and development work at that time?
- A. No. I think the entire investment in mines and plants was somewhere between one million, \$1,400,000.
  - Q. \$1,400,000 for mines—— A. And——
  - Q. —and the equipment?
  - A. They were not segregated.
- Q. How many tons a day was the Uravan plant capable of producing in 1938?
  - A. Approximately 250 tons a day.
- Q. What in your opinion was the most economical size of a plant for producing vanadium oxide in 1938 and 1939?
- A. The most economical size would be the largest possible mill you could build, maybe a thousand, two thousand tons a day, as now exists, Mr. Archer.
  - Q. That's right. Now-and then you would reach

(Testimony of Blair Burwell.)
a point on the lower side below which a plant would
be uneconomical, is that correct?

A. No, that is not technically correct because you might have a very rich ore and you could use a very inexpensive plant and you come out with the same end cost.

You might have a very poor ore and require a very expensive plant to come out with the same cost.

So the relevancy there is the kind of ore that you had to treat. For instance, as Mr. Holland brought out, the early V.C.A. plant treated ore running about 20 per cent vanadium. The early investment was significant, 20, 25 thousand dollars. But when the ore became weaker and the high-grade ore was gone, then many hundreds and hundreds of thousands of dollars had to be put to get a same end result on the cost.

Maybe I am over-belaboring this point, but it is not a fixed thing, Mr. Archer. It is dependent upon the richness of the ore.

Q. Well, speaking of a sustained operation from 1938 to, say, 1946, sometimes you had richer ores and sometimes you had poorer ores, is that not correct?

A. Some mines and some mining districts had a proportion of richer ore. Some mines had a proportion of leaner ore. Therefore, the early mines were very small and they worked on very rich ore and they came out with the same cost, the same numbers. [305]

Q. And when the ore was exhausted, they would no longer be economical, would they?

A. When the higher grade ore would begin to be exhausted, then more and more investments were put in for larger plants, more efficient plants, to make up the deficiency in the richness of the ore. So, it is not a fixed thing, it is a continually moving thing.

Q. In about 1938, from '38 to '44, your ore averaged about two per cent vanadium oxide, is that not correct?

A. I think—

Mr. Alioto: The entire area or restricting that—

Mr. Archer: I am talking about Uravan.

A. The ore varied between three and three and a half per cent and one per cent, and an average of about 1.8.

Q. 1.8 per cent. Now, what kind of a system did you use for making vanadium oxide out of the vanadium ore, in 1938 to 1946?

A. We used a salt roasting process where the ore was mixed with salt and heated at red heat, and the vanadium was then made soluble by the action of the salt and the heat and separated from its worthless gang and the uranium, and then recovered by other methods from there on.

Q. But this method alone would not produce any uranium oxide, would it? [306]

A. It would, if the leaching solutions were alkaline, had sodium carbonate in it, which was a method used by the Vanadium Corporation later.

Q. Would it require additional work to make a uranium oxide plant to produce uranium oxide from the same plant?

A. Well, yes. Although the vanadium extract plants could be partially modified so that in the process of extracting the vanadium in the solutions, in the water, you would also extract a portion of the ura num in the water. That water then is separated and the uranium and vanadium, but that, of course, requires an additional plant that you—an auxiliary plant to recover a portion of it. That was used by the Vanadium Corporation of America but not by the U.S. Vanadium Corporation.

Q. At the time when uranium then became valuable and you were processing the carnotite and roscoelite ores, but particularly the carnotite ores, the economical plant then would be required to process both vanadium oxide and uranium oxide, is that not correct?

A. Why, of course an economical plant is required for anything you do, Mr. Archer.

Q. Well, that is what I mean, but you couldn't just buy the ore and process vanadium oxide and compete with a plant which from the same ore was processing both vanadium oxide and uranium oxide, could you? [307]

A. You're in a technical question, would you please repeat that so I could give you the accurate answer?

(Question read by the reporter.)

- A. Yes, you could.
- Q. (By Mr. Archer): Would you explain how you would do that?
- A. Yes, you might have a very rich ore; you could be processing for vanadium and you could compete with another plant that was processing both vanadium and uranium of higher grades. It's a matter of relevancy as to the ore supply. The key in all of this, Mr. Archer, is the richness of the ore supply and the processing plant is simply something that is fitted to the economic problem of the ore. The ore controls. Therefore, you can't say that the tail wags the dog or the plant controls the industry.

Do I make myself clear?

- Q. Yes. So that it would depend upon the kind of ore. But if both plants were operating from the same kind of ore, the plant which was processing both vanadium and uranium would be a more economical plant, would it not?
- A. If there were the same grade, the same richness, the same impurities and the same costs of ore, you would be correct. But never did those same duplication factors arise. They don't exist.
- Q. In your testimony this morning you referred to the [308] Mesa Vanadium Mill down at Disappointment Creek, did you not?
  - A. That's right.
- Q. You couldn't recall the lawyer's name who was in on that with Mr. Claybaugh, but his name was Charles Holmes, was it not?

- A. That's right.
- Q. He is still living now in Grand Junction, Colorado? A. I believe he is, yes.
- Q. Now, this vanadium mill that you were talking about, could fit in this room, could it not, it could fit in about half of this room?

  A. No.
  - Q. How much bigger?
- A. Well, I think there were two or three acres where they received the ore, had scales, they had outside tanks, they had a little pan, they had a coal pile. I have been there many a time, Mr. Archer, and I don't think you could—
- Q. I realize the land—but I am talking about this roaster where they made the vanadium oxide.
- A. Well, the roaster that they made the vanadium oxide probably would go between this wall and over to where the partition is.
- Q. In your knowledge you had acquired of the Loma mill, which was operated by Messrs. Morrison and Ackerman, did you acquire knowledge of the litigation between Morrison and Ackerman?
- A. Well, no. I heard that there was some litigation but I didn't inquire about that. I didn't know anything about it.
- Q. You didn't know the basis of that litigation. I believe that it is your testimony that in 1938 and 1939 it was your opinion that the price of ferro-vanadium should have been reduced to \$2.25 per pound?
  - A. That's correct, Mr. Archer.
  - Q. This is what you testified to yesterday; on

Monday you testified, at this time, that it was \$2.50, and at that time you were speaking of prices of \$2.90 to \$3.10?

A. That's correct.

Q. And you found out overnight that the prices were \$2.70 to \$2.80 and \$2.90. And so now it is your testimony now it should be \$2.25?

Mr. Alioto: I believe the record speaks for itself. There is no reason to make an argumentative summary of the record.

The Court: This is cross-examination. Proceed.

Q. (By Mr. Archer): What I am getting at, all I want to say, Mr. Burwell, that when the prices came down from the \$3.00 prices to the \$2.70, 2.80, 2.90, you revised your opinion from \$2.50 to \$2.25, isn't that correct?

A. No, I think the record of my previous statements in this regard were based upon \$2.25 vanadium—the price of [310] ferro-vanadium varied from \$2.50 or \$2.60 and later on I think to \$3.10, but you must recall this is a little while ago.

Q. That is what I am getting at.

A. And, however, I can tell you the arithmetic that governed this, which was regardless of the price, end price at the moment. You see, Mr. Archer, it takes two pounds of the oxygen and the vanadium together to make one pound of the metal, allowing for losses, and so the metallurgists, myself, use a convenient kitchen arithmetic. We just take the price of the oxide, the vanadium oxide, and multiply it by two. That means if it cost 40 cents to make the red cake, the fused oxide, multi-

plied by two, the vanadium metal or the vanadium, that is, will cost 80 cents, and that we knew that the ordinary cost of reducing it to the ferro vanadium by taking one pound of aluminum per pound of vanadium, which is 25 or 30 cents, and the labor, which was 10 or 15 cents, amounts to 50 cents.

So conveniently you could add to the 80 cents of vanadium your cost, 50 cents, which I believe is \$1.30 a pound of vanadium metal in the product that you are going to seek a market for.

Now, of course, you must have a profit on that. You must pay your sales costs. But the profit and your sales costs must be tailored to the needs of the customer.

Therefore, between \$1.30 and \$2.60, or \$3.10 or [311] whatever it is—isn't particularly relevant—as long as you know that you can produce it at a price well under \$3.00 or \$2.60. Therefore, if the price of vanadium was \$2.60, you would have \$1.30 a pound of vanadium metal to pay the ferro alloy plant, to pay the profits to the mine, the miners.

Now, you could divide that any way you want, but it isn't relevant in this position to go to the end price. The relevancy is what it cost you to produce and how much you could afford to charge the customer for your profits. Now, that is a matter of your sales. You must understand what I mean.

Q. I may have misunderstood your testimony but, as I understand your testimony it was in 1938

that by reducing the price of vanadium, ferrovanadium, to \$2.25, you would enable it to compete with molybdenum in what we call engineering or constructural alloy steels.

- A. Exactly so.
- Q. Now, one of the functions of ferro-vanadium in constructional alloy or engineering steels is also to control grain size, is that not correct?
  - A. Now, Mr. Archer, it does a dozen things.
  - Q. I am just asking the one.
- A. It controls grain size, as one of the functions. You are correct.
- Q. Now, in 1938 and '39 what was molybdenum selling for? [312]
- A. In what form, Mr. Archer? There are a number of forms of molybdenum.
- Q. In the form in which it was used in constructional alloy steel by the steel makers.
- A. Well, you have to—there is—it's sold as ferro-molybdenum; it's sold as calcium molybdate, and it is sold as molybdic oxide.
  - Q. What was ferro-molybdenum selling for?
- A. Well, I don't recall offhand. You will have to excuse me for not being a walking statistician, but I believe the price of ferro-molybdenum and ferro—ferro-molybdenum was somewhere around one fifty, one seventy-five a pound of molybdenum contained.
- Q. Did ferro-vanadium in the period commencing 1938 also meet some competition from alumi-

num in constructional engineering and alloy steels in controlling grain size?

- A. Only to the limited extent as concerns one of the qualities of vanadium. That was grain size. But, of course, that was only one of about twelve other qualities that was involved in it.
- Q. And what was aluminum selling for in 1938-39?
- A. I think around 25 cents a pound, somewhere in there.
- Q. Mr. Burwell, referring to this chart which has been marked Plaintiffs' Exhibit 27, and these corporations, you were only an officer of the United States Vanadium Corporation, [313] isn't that correct? I mean—I don't say "only an officer." I don't mean it that way, Mr. Burwell. I mean that of these corporations, the only one of which you were an officer was the United States Vanadium Corporation?
  - A. In this period of time to 1947?
  - Q. 1939 to 1946.
- A. No, I was also an officer of the Union Mines Development Company.
- Q. Union Mines Development Company, which is not on this chart, is it?
  - A. No, it is not on this chart.
  - Q. No.
- A. But it was a Union Carbide and Carbon Corporation company.
  - Q. That's correct.

A. The fact that it wasn't on the chart isn't particularly relevant.

Q. No, not at this point, at any rate.

But you weren't an officer of Electromet Sales or Electromet of Canada? A. No.

- Q. You weren't an officer of the parent company? A. No.
- Q. You became an officer of United States Vanadium Corporation in 1944, you became a vice-president when Mr. Van Fleet became president, isn't that correct? [314]
- A. Somewhere around that time. The record speaks for itself.
- Q. Now, prior to 1944 who had been the president or who had been the president of the United States Vanadium Corporation, between 1938 and 1944?
- A. I think the record would state. My recollection is that Mr. Haggerson was president at the time, Mr. Fred Haggerson.
- Q. Now, neither Mr. Haggerson nor Mr. Van Fleet is living at the present time, are they?
  - A. Unfortunately, no.
  - Q. What was your peation in the Union Mines!
  - A. Union Mines Development Company?
- Q. Union Mines Development Company. Is it company or corporation? I'm not sure which. Whichever it is.
- A. I believe I was a director and a vice-president.
  - Q. And who was the president, Mr. Van Fleet!

- A. Mr. Van Fleet.
- Q. Mr. Burwell, I hand you—I want to refer to these exhibits, they are Plaintiffs' Exhibits 33 and 34. These are the exhibits. The first one, Exhibit 34—I guess we will take 33, it is the earliest—. That is from Mr. Van Fleet to Mr. Burwell, September 14, 1938, regarding outside vanadium ore production. And Exhibit 34 is dated just five days later, from Mr. Van Fleet to Mr. Gormely, copies [315] to Mr. Swain and Mr. Sneath regarding competitive vanadium ore production.
  - A. That's correct.
- Q. And I believe you testified that—you said that these were your instructions about acquiring competitive ore and claims.
  - A. Yes, that's right.
- Q. Now, referring first to Exhibit 33. If you will notice in the third paragraph it states:

"In this respect I have had some correspondence with King \* \* \*"

King was Mr. Haldane, who was under you.

"\* \* \* about the application made by Balsley and Kipe for a freight rate on vanadium ore to Castletown, New York, where it is claimed the ore will be reduced. We cannot get any line on this plant here and at Castletown there is no plant now available for this kind of work."

Well, Balsley and Kipe were not members of the United States Vanadium or employees of Union Carbide, were they?

A. No, they were independent miners.

Q. And what about this plant at Castletown, did you know anything about it in 1938?

A. I don't remember at this time. I don't recall anything about Castletown. [316]

Q. You don't recall anything right now?

A. No.

Q. Do you recall that they refined flue dust there and made vanadium oxide, does that refresh your recollection?

A. At Castletown?

Q. At Castletown.

A. No, I just don't recall, Mr. Archer.

Q. So in your investigations of your competitors, you do not recall investigating the Castletown Manufacturing Company, do you?

A. No. That was in the East, Mr. Archer.

Q. I see. Now, refer to Exhibit 34, Mr. Burwell, which—

The Court: Just a minute. We will take a few minutes' recess.

(Short recess taken.) [317]

Mr. Archer: Shall I proceed, your Honor? The Court: Very well.

Q. (By Mr. Archer): What happened to Exhibits 33 and 34, Mr. Burwell?

A. They are right here, Mr. Archer.

Q. I show you now Plaintiffs' Exhibit 34, Mr. Burwell. This is a letter dated September 19, 1938, from Mr. Van Fleet to Mr. Gormely, which makes reference to competitive vanadium ore production, does it not?

A. That is right.

Q. You have already testified that you did not

purchase the output of the Vitro Manufacturing Company, isn't that correct? That is the first one referred to.

- A. I don't recall the testimony, Mr. Archer, about purchasing the Vitro Manufacturing output. I don't recall that.
- Q. Do you recall whether you did or did not purchase it?
- A. Do you mean the output of fused vanadium oxide?
  - Q. That is right, from Vitro.
- A. No, I don't think we purchased it, to the best of my knowledge.
- Q. Subsequently, during the war period, do you recall that they processed an Otavi ore for the Metals Reserve Company, or did you have anything to do with that?
- A. I think they did. I just knew of that casually, and not of my own direct knowledge. [318]
- Q. The next two companies are the Shattuck Chemical Company and the North Continent Mining Company. That is really the same company, isn't it? I think it is on the second page of the exhibit.
- A. Well, yes and no. The North Continent Mining Company was separate from the Shattuck Chemical Company. They delivered ore to the Shattuck Chemical Company for awhile, and then later there was some separation of the companies. I don't remember.

- Q. North Continent had its own oxide plant after that, isn't that correct?
- A. I think that is true. I think they started the North Continent Mining Company mining richer ore and shipping it to the Shattuck Chemical Company, and then later on they built their own plant at Slick Rock.
- Q. You did not buy their production of vanadium oxide, did you?
  - A. No, we bought their production of orc.
  - Q. The Metals Reserve Company?
- A. I believe—I am not too clear on it, but I believe U. S. Vanadium bought some of their ore directly.
- Q. Yes, I think they did, but most of the ore that was bought from North Continent was bought for Metals Reserve, particularly prior to 1944?
- A. I don't remember the proportion, Mr. Archer. I think [319] we bought twenty-five, twenty-eight hundred tons of high-grade ore from North Continent for U. S. Vanadium Corporation.

Now, there was additional ore purchased for the Metals Reserve about the same time, and then following that we purchased the ore for U. S. Vanadium Corporation at Durango.

- Q. Then the next company on here is the Mammoth mine in Arizona, which was associated with the Molybdenum Corporation of America, is that not correct?
- A. Well, it just says "Miscellaneous," Mr. Archer.

- Q. I think you have to turn to page 2. They have it underlined, or Mr. Van Fleet has it underscored in the letter.
  - A. Yes. What is your question about it?
- Q. The production from the Mammoth mine went to the Molybdenum Corporation of America, is that not correct?
  - A. I don't know that that is correct.
- Q. You do not know one way or the other, is that right?
- A. The vanadium in the ore concentrates produced I do not believe went to Molybdenum Corporation.
  - Q. Or did it go to Vitro?
- A. I believe it went to Vitro, and it is possible that the molybdenum, after separation, went to the Molybdenum Corporation.
- Q. 1 think my recollection fails me. I believe you did testify it went to Vitro, Mr. Burwell.
- A. I am not sure, but I think that is the case, Mr. Archer. [320]
- Q. If you will turn to page 3, we come to the Anaconda Copper Company. A. Yes, sir.
- Q. You will notice in the second paragraph there on page 3 Mr. Van Fleet states:

"They expected to be producing vanadium this year after installing equipment costing about \$200,-000, but they did not feel inclined to proceed with this expenditure this year. I imagine when business is better they will begin producing fused oxide. It is estimated that this plant will produce ap-

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(Testimony of Blair Burwell.)

proximately 100,000 pounds of VaOs yearly, and we have agreed to purchase the output."

Do you recall testifying vesterday, when Mr. Alioto asked you about this, that in September, 1938, you had a large inventory of vanadium oxide? Do you recall that?

- That is correct.
- Q. You did not mean to imply in your testimony yesterday, though, that you had purchased the Anaconda Copper Company's output in 1938, did vou?
- A. Well, I believe we purchased it in 1939. I am not sure when we started purchasing, but I remember that Anaconda was beginning to produce in 1938, and I was at their plant at Anaconda at that time and went into the question of design [321] with Mr. Frick, their chief metallurgist, and instead of producing fused oxide, which would involve an expensive plant, we assisted-I and our engineers-in making a plant to produce just red cake.
  - Q. That is the red cake (indicating)?
  - That is right. 1.
  - The intermediate? Q.
- And we proceeded to move the red cake to Rifle, or to wherever we desired to convert it-
  - Q. You moved it to Rifle—
  - Mr. Alioto: Wait a minute.

I do not think he should interrupt the witness in the middle of a sentence.

Mr. Archer: I beg your pardon.

I think the answer has gone away beyond my question, but you can finish your abswer. Go ahead.

The Witness: Would you review your question?

Q. (By Mr. Archer): I was just asking whether or not you bought their production in 1938.

A. But I don't recall as to when we began to buy the production.

Q. Now, my second question is: They never produced to sed oxide, did they?

A. They produced red cake, [322]

Q. (By the Court): What!

A. They produced red cake.

Q. (By Mr. Archer): That is the intermediate product?

A. That is right. Because it cost a great deal of money to make the fused oxide from the red cake.

Q. And the red cake was processed, as you started to say, at Rifle, wasn't it?

A. That is right.

Q. And when did Rifle go into operation, Mr. Burwell? A. I believe 1940 or 1941.

Q. 1941, wasn't it?

A. I am not sure. But we processed red cake, or received red cake, at other plants, too, before that. You see, we processed red cake at Uravan. I am not sure whether this went prior to that to Uravan, or whether it went to Niagara Falls. We were using red cake for manufacturing ammonium meta vanadate, another salt, and I believe we used

the dry red cake for other purposes than making fused oxide. So the record as to where we used the red cake from Anaconda, we used it for two things:

We used it for making fused oxide, and we also used it for making ammonium meta vanadate, a catalyst in which red cake is ideally suited. That manufacture amounted to 100,000 pounds a year, and was carried on at either Niagara Falls or the old [323] Rifle plant which was rebuilt in 1941. You see, a Rifle plant was actually built in 1926, so we still had a plant site and equipment there part of the time.

- Q. But it was not operating?
- A. No, it was not operating. That is the roasting plant. We also had at Uravan a plant for making vanadate, and I do not recall the details of where all this went at that time.
- Q. I was trying to establish the date when you purchased it, Mr. Burwell.
- Mr. Alioto: Exhibit 14 shows the date, Mr. Archer, if you want to use it.
- A. That is in the record, I believe, as to the date they purchased it, and I wouldn't trust my memory at this time.
- Q. (By Mr. Archer): Referring to Exhibit 34, Mr. Burwell, the one that you have in your hand, the next competitive ore produced, or referred to, is the International Vanadium Corporation, a lead vanadate property at Dripping Springs. This operation failed because it was uneconomical, was it not, Mr. Burwell?

- A. That is what Mr. Van Fleet says. I did not have any direct knowledge of this operation.
- Q. In regard to the Gateway Alloys plant, which you showed to the jury here at Gateway, the Gateway mill was originally run by Brown and Bowman, was it not? It was built by Harry Brown, Jr.?
- A. It was built by Harry Brown, Jr., and operated by Harry Brown. Mr. Bowman was a banker.
- Q. Mr. Bowman was a banker. And they mined the Calamity claims, and the Outlaw, and the Maverick claims, did they not—what we refer to as those claims?

  A. That is right.
- Q. And those claims were owned by the Molybdenum Corporation of America, were they not?
  - A. That is right.
- Q. And Harry Brown and Mr. Bowman contracted to purchase those claims from the Molybdenum Corporation, did they not?
  - A. I think that is right.
- Q. And they started their operation at Gateway? A. Yes.
- Q. The question I wanted to ask was, I believe you testified yesterday that U.S.V., United Vanadium, your company, mined those claims in 1939, and that the Gateway Alloys plant failed in 1940. I want to suggest now, wasn't it just the reverse? Didn't they operate in 1939 and come to you in the spring of 1940 and ask for some assistance?
- A. Well, now, the dates and sequence are approximate. I think in my testimony I qualified that.

You have to be a bit merciful. This has been a long time ago.

- Q. I understand completely.
- A. But I think it might have been one way or the other. [325] The sequence was approximately as you stated.
- Q. That is right. So in 1939 this was a period of foreign sales of vanadium oxide they were operating? In other words, the foreign countries were tooling up, and we had not gotten into the war production as strongly as we got into it later on. That is correct, isn't it?
  - A. Yes. I didn't know where their sales went.
  - Q. Oh, you didn't know?
- A. In fact, they didn't make very many sales, Mr. Archer.
- Q. In the spring of 1940 you do recall that the administration in Washington began to curtail foreign shipments of vanadium oxide, and finally put an embargo on them completely in July of 1940, do you not?
- A. I don't know that of my own knowledge. I think that is a matter of record. If you state that is the case, that is probably it.
- Q. When Harry Brown came to you in regard to mining the Calamity and Outlaw claims, didn't he tell you that he was behind on his payments to the Molybdenum Corporation of America, and ask you to take over the lease for a year and make the payments, to see how they could go—say that the claims would stay in his control?

- A. Yes, that is right.
- Q. And so then you mined for a year, until 1941, and you turned it back? [326]
  - A. That is right.
- Q. And it was subsequent to that time that Mr. Nisely started to mine the claims and to operate the Gateway mill, isn't that right?
  - A. That is correct.
- Q. Now, if you will look at the map there of Gateway around the Calamity and the Outlaw claims, there are many—the Maverick claim—there are many other vanadium ore resources up there in addition to those claims which the United States Vanadium Corporation mined, are there not, and they were there from 1938 to 1946?
- A. Well, you are asking me a question about other vanadium claims. Will you tell me which vanadium claims you are referring to?
- Q. There are many others. There is the Arrowhead group, is there not?
- A. Arrowhead was not developed and known to contain any ore at that time.
- Q. But it was developed subsequently to that time?
- A. But it had no ore. It was not known to be a mining claim. There was even a question of title on the Arrowhead claim at that time, because there was no ore, just a scratch in the sage brush, and there wasn't anything showing.
- Q. You mean you had not discovered the ore there?

- A. Yes. But you asked me- [327]
- Q. I will withdraw-
- A. If there are claims known to be vanadiumbearing and having vanadium.
- Q. I think I said known claims. I do not mean known claims. I am saying that there were vanadium resources there, known or unknown, discovered or undiscovered, in addition to the Calamity, Outlaw, and Maverick claims, in 1938?
- A. I can't testify as unknown and undiscovered claims and answer your question in this court, Mr. Archer.
- Q. I am not asking you whether you knew about them then.
  - A. Would you repeat your question?

Mr. Alioto: He is asking him what he knows now as compared with what he knew then. As long as we are speaking about the time—

Mr. Archer: My purpose is to show that in the area of the Gateway mills there is, and has been throughout this entire period, a large supply of vanadium ore.

Mr. Alioto: Your question includes undiscovered. The Court: You can ask him that question.

The Witness: You see, what you are trying to ask me, Mr. Archer,—and I will try to answer it—to a certain extent I see your point. Surely the area up on these mesas contained vanadium-bearing formations. Its potential was quite extensive. Later I made an appraisal of this area. This ore was tributary to the Gateway mill. And I believe my

later appraisal, to give you pretty close figures, which I made for the Department of Justice in the Union land case, was a hundred and sixty some thousand tons of vanadium ore and five or six million pounds of vanadium oxide. But, Mr. Archer, the ore that was contained in those areas is under deep burial and could not be mined competitively at that time.

Now, the ore that Harry Brown was mining, and the immediate ore that could be mined to make the plant work, was the ore that was laying close to the surface and in pits, that any man with a shovel and a strong back could walk up there, load it into a truck and take it away. There was probably fifteen or twenty thousand tons of cheap available ore just lying right on the surface in the Calamity properties that Mr. Brown was trying to operate.

Back of those claims, under the Arrowhead and under deeper cover—and they are still mining them—there was other ore, but it would cost a great deal more, and you couldn't get into that property unless you started in through the edge of the rim.

So all we did to help Mr. Brown out and offer to take care of the situation in controlling the district, which were my instructions and which I carried out, was to take all of the surface ore that was available that could be economically taken down to the Gateway plant, and to do that—you apparently know something about that region—we built a road, not [329] down to Gateway; we built a road up the other side, that went down to Mesa Creek, with

bulldozers and graders, which was of no use to the Gateway plant, but over that road we cleaned up all the surface available ores on the claims that bordered the top of the mesa, so when we were through we had all the available cheap ore that could possibly be used to implement a small plant.

Now, later on, when you get into a different phase, where the high-, rich-grade ore is exhausted, then you can go into deeper digging and more venture, and then the thing becomes economic under a new pattern. That is what exists today. That region today is producing about \$15,000,000 worth of uranium and vanadium.

Q. But it takes a lot of money to develop it, doesn't it?

A. It takes a progressive amount of money. 1 mean, you start with a high-grade ore on the surface and maybe a little plant, and then, again, the development of these things is a progressive one. After you have the ore that runs two or three percent of vanadium on the surface that can be mined for \$1.50 or \$2.00 a ton, and hauled to the plant for maybe three or four dollars more, after that you have to begin looking for the stuff in deeper areas. That cheaper ore can go into a pot-sized plant, and maybe you can make some money on it if you have a plant and the cheap, rich ore on the surface. But later on, as you exhaust that area, then it comes to the [330] question of rolling up your sleeves and putting in a million-dollar plant. And, as a matter of fact, that is just exactly what happened later

on in that particular area. But the control of the whole thing is the available ore on the surface,

- Q. At the time you made the agreement with Harry Brown and Mr. Bowman to mine these claims for a year you considered that it was a favorable purchase of ore for the United States Vanadium Company, did you not?
  - A. Assuredly, or we would not have done so.
- Q. Regardless of whether you were keeping it out of competition?
- A. Regardless of what we did, we did it for the good of the policy of the company.
- Q. It was an economical thing so far as the ore was concerned, wasn't it?
- A. The policy of the company had two phases: One was the economics of the moment, and the other was the projected economics of the future. We were always doing something. We might mine ore that cost us more money than it was worth at the moment, to start an operation, because five years from then we knew the ore would become valuable. This is the strategy of all mineral deposits. [331]
- Q. In other words, there were good, sound business and engineering reasons for mining those ores at that time?
- A. Of course good, sound engineering and business reasons, and reasons for the future. Even then you were looking at uranium from that far, that was one of the richest uranium areas in all the early days. And in '39 we had already had the knowledge that there was going to be something for

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uranium because it was 1939 when the first breakthrough on uranium occurred in Germany. If you will look at your records.

- Q. Now, you also testified yesterday in regard to Dry Valley in the Monticello area, you recall that?

  A. Yes, I recall testifying.
  - Q. Are they on this map?
- A. I think I pointed that out to the Jury, Mr. Archer; I believe it was over across the state line into Utah, about where my finger is pointing, and I think maybe 75-80 miles from Uravan and this other operation in Colorado.
- Q. Now, the Dry Valley claims were also originally owned by the Molybdenum Corporation of America, were they not, or a part of them, the ones you were referring to yesterday?
- A. They were owned by many, many people in the course of their ownership.
  - Q. Let's say-
  - A. About that time you're-
- Q. ——in 1938, Molybdenum Corporation had it? [332]
  - A. They acquired it from Floyd Ackerman.
- Q. And then the next person who acquired them was Leverett Davis from Salt Lake City, Vanadium Products Corporation?
- A. That may be the case. The record speaks for itself. I think he did—there was a man who was trying to make an operation over there. I believe that's the name.
  - Q. He had some tie-up with this fellow Balsley

(Testimony of Blair Burwell.) that we have referred to, the independent operator, did he not?

- A. I don't recall, but that could easily be.
- Q. Well, don't you recall, however, that you and Mr. Van Fleet bought these claims, some claims, in Dry Valley?

  A. We acquired them, yes.
- Q. Well, didn't you acquire them from Mr. Balsley and from Leverett Davis?
- A. We acquired them from whoever had the title at the moment. But the underlying ownership, just like over in Gateway, rested with the Molybdenum Corporation, and—whatever the record is, Mr. Archer. I believe you—you probably are correct, that Mr. Balsley—I believe I discussed it with Mr. Balsley, and now that you refresh—our engineer, Mr. Emigh, investigated the properties when they were held by Mr. Balsley under a leasing arrangement, much the same as the other side of the state line.
- Q. And Mr. Emigh, his name is spelled E-m-i-g-h, is that right? [333]
- A. That's right. He was one of our mining engineers in U. S. Vanadium Corporation. Now with Monsanto.
- Q. And he was one of the New York employees who was in charge of the metal reserve program, wasn't he?

  A. No, he wasn't, no.
  - Q. Wasn't he under you in regard to that?
- A. No. Mr. Emigh was working under me at that time or delegated to our operation at Uravan.

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- Q. Oh, at that time. I guess I was too early. But—
- A. Later on he did some work. I mean, the task of those engineers was shifted from one to the other. There was really no dividing line as to their work or their responsibility.
- Q. Well, to go back to this time when you acquired the Dry Valley claims from Leverett Davis and Mr. Balsley, you recall that Balsley and Leverett Davis came to a disagreement and that Balsley came in to see you and said that Leverett Davis had gone east to see Vanadium Corporation?
  - A. You say so. I don't know.
  - Q. I wonder if you recall it.
  - A. I don't recall it.
- Q. I show you a copy of a telegram from Blair Burwell to J. R. Van Fleet dated March 10, 1941, and ask if that refreshes your recollection—if you can identify the telegram and whether it refreshes your recollection as to the occasion when you acquired the Dry Valley claims? [334]
- A. (Witness examining) Yes. I think this does, does state something along that connection with relationship to your question. I just can't at the moment identify—let me read this again (witness examining). I can't get the date on this, Mr. Archer.
  - Q. Let me see if I can help you.
  - A. (Witness examining.)
  - Q. It looks—it says 1941—— A. 1941.
  - Q. And then March the 10th.

A. (Witness examining his briefcase) Excuse me. Let me just check something here, (Examining documents) I believe in 1938 we have a record of an examination of that property by Mr. G. Donald Emigh, and I have a file number in the Carbide files of that examination, which was at Mr. Balsley's—that Mr. Balsley was named as the man that he saw.

Now, if I could—don't fumble around too much, I could find that reference.

Q. (By Mr. Archer): I'm thinking of the time when United States Vanadium Corporation took over these claims.

A. Well, the date on that, I am confused. The date looks different from the telegram.

Mr. Alioto: That is March 10, 1941 !

Mr. Archer: March 10, 1941.

A. Whatever the record is. If that is the record, that's it. [335]

Mr. Archer: Could I have this letter marked in evidence, this telegram?

Mr. Alioto: We have no objection.

The Clerk: Defendant's U, Exhibit A, admitted and filed in evidence.

(Whereupon, telegram dated March 10, 1941, Burwell to Van Fleet, was received in evidence and marked Defendant U's Exhibit A.)

Mr. Archer: I want to read part of this, your Honor.

It is from Blair Burwell to J. R. Van Fleet, dated March 10, 1941:

"Balsley Telephones Wants to Know if We Are Interested Dry Valley Stop Apparently Balsley Is In Disagreement With Davis Who Is In East Promoting Something Stop Will See Balsley Tomorrow and Advise You of Situation Stop"

Then, the rest is about railroad fares.

The Witness: Why don't you read the rest?

Mr. Archer: Has that something to do with it? The Witness: It's pertinent.

Mr. Alioto: Yes, it certainly does. Read the last three lines—"This Plan Looks Increasingly Interesting"—

Mr. Archer: It says: [336]

"Railroad Will Establish Tariff On Ore If Requested Thompsons to Rifle Two Twenty Five Proportional From Cisco and Green River Stop This Plan Looks Increasingly Interesting Will Have Dickson Estimate For You On Rebuilding Roaster Leaving For Grand Junction Tonight."

Does that refer to Rifle or Dry Valley?

A. That refers to the Monticello plant, the whole Dry Valley situation that I was testifying here that resulted in so much acrimonious debate in the previous trial. It is very pertinent because, you see, this freight rate was being set up because after we had been denied the opportunity to build a plant at Monticello and use—in that area, because the water had been taken away from us by——

Q. By Mr. Holland's clients over there?

A. Why, we switched immediately—why, we switched immediately to double the capacity at Rifle

and move about 20,000 tons of stockpile ore that we had stockpiled in Monticello to Rifle, and at this time it was being done in a big jump to prevent Mr. Haggerson coming in and ruling that he be given that ore. That was the request, that we not only give the ore pile to Mr. Haggerson—to Mr. Bransome of the Vanadium Corporation of America—we were fighting this situation and that was an emergency freight rate which was set in operation in 48 hours to move ore into Rifle plant instead of [337] moving it into Monticello. So that there is a lot of story behind that telegram.

Q. That's right. Then it says-

A. A part of the conflict between these two companies, Mr. Archer.

Mr. Alioto: Which two companies!

Mr. Archer: Between which two companies?

A. The Vanadium Corporation of America and U. S. Vanadium Corporation.

Q. They were successful, though, in getting the plant at Monticello, were they not?

A. Yes, they had a little more success on the top side than we did.

Q. Mr. Burwell, you have testified here about various ore prices and how they were set. Do you recall in September, 1944, asking Mr. Robison to make a survey of the ore prices which had been used by United States Vanadium prior to that time?

A. Well, I probably did, if it is a matter, of record.

Q. I show you what has been marked Plaintiff's

Exhibit 11. Part of this is V.C.A. exhibits which don't—I hope don't concern you. Here's your letter and here's the reply. They are already in evidence.

A. (Witness examining) Yes. Now, what is your question regarding this?

Q. The following letter is the reply—not the following, [338] those are the V.C.A.—. The first letter—these are somehow mixed up here, but this is his reply to your request for a survey of the ore prices.

A. (Witness examining) Yes, I think this letter—I know the people. Of course it was written.

The Court: What is your question?

Mr. Archer: I wonder if he could identify those letters. A. I just have.

Q. Is his reply correct as to the ore prices paid and how they were set by United States Vanadium?

A. At this moment I can't state if it is correct. It may be, but—I know the people. Now, Mr. Jack Robison—. What is the date of that letter?

Q. September, 1944.

A. Mr. Robison was general superintendent at that time. But he entered the employment of the company, I think, about 1940-'41.

Q. But you asked him to check with Joe Weston?

A. I asked him to check with Joe Weston. Now, maybe those figures are right, I don't recall.

Q. Well-

A. I presume that they are. I presume that they are.

Q. Wasn't this report to you made by your inferiors? A. That's right. [339]

Q. You didn't object to it, did you?

A. Well, I don't believe so. It would be-

Mr. Archer: Your Honor, I should like to read these two letters, if I may.

The Court: Very well.

Mr. Archer: The first is a letter dated September 14, 1944, from Blair Burwell to J. L. Robison, copies to W. G. Haldane—we have identified—and J. E. Weston.

"Dear Jack:

"We have recently been asked for a review of ore prices and ore buying arrangements since 1926 in Colorado."

We don't go back that far in the answer, though, your Honor.

"I wish you and Joe Weston would go over this and give me a summary of our past procedure in this connection. Joe can probably supply a great deal of information from his memory as to Uravan ore purchases beginning in 1936.

"It would be of value to make a running story of what range of prices existed and when changes occurred and the reasons for these changes of price."

This is the reply dated September 25, 1944, from Mr. Robison to Mr. Burwell, copy to Mr. Haldane.

"Dear Blair: [340]

"In reviewing the ore purchase records in Uravan V. P. Plant——"

That means vanadium paradox—correct?

A. Yes.

Mr. Archer: (Reading.)

- "\* \* and checking with Joe Weston, we submit the following information concerning ore purchases at Uravan.
- "1. The earliest ore settlement found on record was for October, 1938. From October, 1938 to September, 1939, the purchase of ore was, in most cases, by special arrangement for individual purchases. Ore purchased on V<sub>2</sub>O<sub>5</sub> contained was 17c per pound for 2% V<sub>2</sub>O<sub>5</sub> ore, increasing one cent per pound for each per cent increase above 2%."

Then he goes through the scale of prices, which are here if some one of you want to read, you can.

The Witness: Doesn't he bring out the matter of hauling allowance?

Mr. Archer: I am getting to that—in one, yes. I have just skipped part of this paragraph on the prices.

"During this time, the ore which was being offered for sale was not considered greatly important due to the fact that the stockpiles were being increased by Company mining operations." [341]

- A. That's right.
- Q. (By Mr. Archer): In other words, during the period '38 through, let's say, '40, you got most of your ore from your company mines?
  - A. That's right.
  - Q. Actually, throughout the entire period of '46,

(Testimony of Blair Burwell.)
you always got most of your ore from the company
mines on your own plants, isn't that correct?

- A. That's correct.
- Q. That's right. And you couldn't have had a 40c cost on oxide if you had been buying ore at 21c and 31c, could you?

  A. No.
  - Q. All right.
- "2. By September, 1939, more ore was offered for sale and it seemed necessary to establish a regular market price. Attachment No. I lists the prices which were paid at this time.
- "3. On January 1, 1941, we increased the amount paid to the sellers by paying 5c per ton mile in addition to the price schedule shown on Attachment I. In order to encourage production from mines located at such a distance from the [342] plant, transportation allowances were necessary for the continuance of these operations."

So you paid the miners, in addition to the cost of the ore, you paid them for hauling it to the various stations?

- A. In some cases, yes. There were negotiated prices on varying locations, varying conditions.
  - Q. (Reading.)
- "4. In June, 1942, an additional allowance of \$1.50 per ton on ore delivered was added to the schedule Attachment I in order to meet competi-

(Testimony of Blair Burwell.) tion with plants more favorably located to receive ore from south and southwest areas."

- A. That was the Vanadium Corporation plant.
- Q. So you put on the hauling allowance in order to meet the competition from them?
- A. \$1.50 was the difference between hauling ore from the Naturita plant down to the Uravan plant, because the highway—the road went through Naturita and went on down to the Uravan. Therefore, the \$1.50 was just the differential between the two plants. I believe that was the case.
- Q. And that was in order to keep the miners that were closer to Naturita—in order to get them to bring the ore up to you?
- A. Well, most of those miners weren't at Naturita. They were 50 miles south or—— [343]
- Q. In other words, to get them to haul past Naturita?

Mr. Alioto: Just a minute, Mr. Archer. I think you should let the witness finish his answers without interrupting him the way you have been doing here. I will object on that ground, if your Honor please.

Mr. Archer: I'm sorry, Mr. Burwell.

The Court: We have been generous now in permitting counsel. Don't interrupt.

Mr. Archer: I'm sorry, your Honor. Go ahead.

- A. What is your question?
- Q. (By Mr. Archer): I believe I had asked the question: The reason you paid the \$1.50 hauling allowance was to get the ore from miners located

nearer to Naturita and you were saying they were farther south.

- A. Yes, it was simply to make the same price at Uravan for a miner for his ore delivered as it was at the V.C.A. plant at Naturita 50 miles up the river.
  - Q. Did V.C.A. pay a hauling allowance?
- A. Well, they, I believe, did pay a certain hauling allowance to Naturita later, Mr. Archer.
  - Q. I mean in June, '42.
- A. You have got to give me a little help in your question.
  - Q. In June of 1942, at this time?
  - A. Well, I don't just offhand recall that.
  - Q. You don't recall? [344]
- A. You are simply reading a letter of Mr. Robison's that records what the factual record was. Now, if it is beyond that letter, why, ask your question about it on the time and what hauling allowance and what distance, and I think I could help you.
- Q. Well, specifically, it is stated in here that in June, 1942 an additional allowance of \$1.50 per ton on ore delivered was added to the schedule.
  - A. I believe I covered your question.
- Q. Then what I wanted to know was whether, at that same time, you knew whether V.C.A. was also paying that hauling allowance?
  - A. At this time, Mr. Archer, I just don't recall.
  - Q. You don't recall that.

The rest of the letter, if anybody wants to read

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(Testimony of Blair Burwell.) it, it recalls 1941 special purchases, Harold Stone——

A. Mr. Archer, in relationship to one of your questions-it will just take a swift minute. This study, this is correct. I recollect now the letter. The prices, as I said, being 16c in the early days, were based upon the man's mine and so we bought the ore at his mine. Now, whatever the price was, if it was 17c, it took 5c more to take it to Uravan. So when we talk two languages, we talk about price. we always considered in the office, in the administrative end of it, the cost at our ore bins; but what we might have paid the miner, 17c or [345] even 10c, if it was far distant at the location of his mine, then we paid the charges on the trucks to bring it. He didn't have to pay it. So there is a great deal of detail there that I think is really immaterial as far as the accuracy-I think around 21c delivered. It was just an approximation I testified to. And I think it is essentially correct.

Q. So that they had, then, to be altered to meet the conditions as they arose?

A. As I testified, to meet the conditions, the locations and the various positions of the miner.

The Court: We will recess at this time until 2:00 o'clock.

(Recess until 2:00 o'clock p.m.) [346] June 4, 1958—2:00 O'Clock P.M.

Mr. Archer: May I proceed, your Honor? The Court: You may.

## BLAIR BURWELL

resumed the stand and testified further as follows:

## Cross Examination—(Continued)

Q. (By Mr. Archer): Mr. Burwell, I think several times during your direct examination you referred to the Meta' Reserves Company. I hand you what purports to be an agreement between Metal Reserves Company and the United States Vanadium Corporation, dated February 25, 1942, and ask you whether you can identify that.

A. I can identify it.

Mr. Archer: I offer in evidence, your Honor, this agreement dated February 25th, 1942, between the United States Vanadium Corporation and Metal Reserves Company.

Mr. Alioto: No objection.

(The document referred to was thereupon received in evidence and marked Defendant Union Exhibit B.)

[See Book of Exhibits.]

- Q. (By Mr. Archer): Mr. Burwell, this agreement is signed by G. Temple Bridgeman. Executive Vice-President for Metal Reserves Company. Were you acquainted with him?

  A. 1 was.
- Q. He had never been employed by Union Carbide or its subsidiary, had he?
  - A. Not to my knowledge.
- Q. And it is signed by United States Vanadium Corporation by J. R. Van Fleet, whom we have already referred to.

Your Honor, I would like to read just a few of

(Testimony of Blair Burwell.) these provisions. If anybody wants to read more, they can.

Mr. Alioto: What capacity did Mr. Van Fleet sign in, Mr. Archer?

Mr. Archer: Vice-president.

Mr. Alioto: Vice-president. Thank you.

Mr. Archer: (Reading.)

"U. S. Metal Reserves Company, Washington, D. C., February 25th, 1942.

"United States Vanadium Corporation.

"Re: Vanadium Agency Agreement.

"Gentlemen: In accordance with the recommendation of the War Production Board, we wish to proceed with the program for increasing the supply of vanadium urgently needed for war requirements, by producing vanadium from the non-commercial lead vanadate properties of the Southwest with which you are familiar. Accordingly we hereby appoint you our agent, subject to cancellation in our sole discretion upon one month's notice to carry out this program on the terms [348] set forth below.

"1."

The first paragraph relates to investigation.

The second paragraph:

"Development and Production. You will purchase concentrates from third parties required for the program in such quantities and on such terms recommended by you and approved by us.

"You will recommend for our approval plans and designs for the development, equipment and operation of a particular property in its entirety, or (Testimony of Blair Burwell.) covering certain stages thereof from time to time, such recommendation to specify, as far as practicable, the equipment and facilities, the leases, the contracts and the purchases involved and estimated costs thereof."

"Upon our written approval of the development of a particular property, you will take all the necessary steps as recommended to develop and equip the property, mine and mill the ore for the concentrate smelted and refined, and to act as our selling and shipping agent in disposing of the vanadium and other materials purchased or produced."

It goes into cost and some of the details, the fee of \$1,000 a month, and the last paragraph, paragraph six, reads: [349]

"We agree to protect, indemnify and save you harmless from and against all claims and demands made against you and all judgments, loss or damages incurred by you in the performance of this agency within the authority granted which are not the result of your negligence or intentional misconduct."

Q. Mr. Burwell, who in the United States Vanadium Corporation handled this lead vanadate operation, do you recall?

The Court: Just a moment. What is the date of that letter?

Mr. Archer: February 25, 1942.

The Court: To whom was it addressed?

Mr. Archer: Well, it is a letter agreement from

the Metal Reserves Company to the United States Vanadium Corporation.

The Court: The United States Vanadium Corporation is a subsidiary of the principal defendant here?

Mr. Archer: Of Union Carbide, not the principal defendant.

The Court: One of the defendants. Pardon me for interrupting your questioning.

- Q. (By Mr. Archer): I will restate the question, Mr. Burwell. I was wondering who were the individuals in the United States Vanadium that handled this red vanadate operation.
- A. This was principally handled directly by Mr. Van Fleet [350] and myself. I did a small amount of work with it, but the lead vanadate program and agency as defined was a very minor thing. It fizzled out, so it did not become important at all. Mr. Van Fleet did most of the direct handling of that.
  - Q. This was not on the Colorado Plateau!
  - A. This was not on the Colorado Plateau.
- Q. (By The Court): What territory did this cover?
  - A. Arizona, the State of Arizona, your Honor, principally.
- Q. (By Mr. Archer): Would this be in the area of where the Mammoth-Saint Anthony Minwas?

  A. That is right.
- Q. You have already referred to that several times? Λ. That is right.
  - Mr. Alioto: May I have that, Mr. Archer!

Q. (By Mr. Archer): I now show you an agreement dated April 9, 1942, between Metal Reserves Company and United States Vanadium Corporation, entitled \*Re Agency Agreement, Sandstone Vanadium, Durango Project," and ask you whether you can identify that.

Mr. Alioto: Mr. Archer, if you are worried about authenticity, we will stipulate to that. Don't waste any time on it. We will take your representation.

Mr. Archer: Thank you. These are all originals signed.

Could I have this marked as Defendants' Exhibit next [351] in order?

(The document referred to was thereupon received in evidence and marked Defendant U's Exhibit C.)

[See Book of Exhibits.]

Q. (By Mr. Archer): I would like to read portions of this. This again is signed by Mr. G. Temple Bridgman for Metal Reserves, and J. R. Van Fleet, United States Vanadium Corporation.

The Court: This Metal Reserves Company was a government agency?

The Witness: It was a government corporation, wholly owned agency of the government.

Mr. Archer: "Metal Reserves Company, Washington, D. G. April 9th, 1942.

"United States Vanadium Corporation, 30 East 42nd Street, New York, N. Y.

"Re Agency Agreement, Sandstone Vanadium, Durango Project,

"Gentlemen:

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"In accordance to the recommendation of the War Production Board, we wish to proceed with a program for increasing the supply of vanadium urgently needed for war requirements by purchasing the vanadium or the non-commercial sandstone ore properties of the Southwest with which you are familiar."

- Q. Now, the sandstone ore properties were which area? [352]
  - A. The Colorado Plateau.
- Q. This is the area about which you are generally—most familiar? A. That is right.
- Q. "In your letter of March 18, 1942, you informed us of several possible locations for vanadium reduction plants in the Southwest. With the exception of a proposed plant at Durango, Colorado, it is our understanding that each plant would cost in excess of \$100,000 and would therefore be handled as a Defense Plant Corporation project if and when approved. As the Durango plant will not cost in excess of \$100,000, we are writing this letter to authorize you to proceed on terms similar to the vanadium agency agreement of February 25th, 1942, covering the lead vanadate properties. The Durango plant and any other plants approved by and constructed for the Defense Plant Corporation will be operated by you at the expense and under the direction of this company under a single operating agreement to be entered into hereafter between your company and this company."

It then goes into the acquisition of the plant, purchase of material, costs and disbursements, and it has the same indemnity clause as the prior agreement.

Mr. Alioto: Mr. Archer, that document referred to [353] a prior letter. Do you have the prior letter by any chance?

Mr. Archer: I will look for it. These are Metal Reserves' files and if I can find the letter I will get it, or send for it.

Q. (By the Court): From this date, 1942, how long did you operate under the direction of the Government in accordance with those letters?

A. Your Honor, are you asking me that question?

Q. Yes, sir.

Mr. Archer: Your Honor, I have one more letter, one more agreement. Maybe I should put that in first. Pardon me for interrupting.

The Court: Very well.

Mr. Archer: May I have this, the vanadium agency agreement dated May 9th, 1942, between Metal Reserves and United States Vanadium Corporation, marked as Defendant's Exhibit next in order.

Mr. Alioto: We will stipulate to authenticity.

(The document referred to was thereupon received in evidence and marked Defendant U's Exhibit D.)

[See Book of Exhibits.]

Mr. Archer: This is a regular agreement, not a letter agreement, dated May 9th, 1942.

"Witnesseth, that whereas the increased domestic production of vanadium and its ore concentrates and the expansion of facilities within the United States [354] for such production are necessary to the national defense, and to the successful prosecution of the war efforts of the United States;

"And whereas, in accordance with the recommendation of the War Production Board an agreement dated April 9th, 1942, has been entered into between Metals and Vanadium for the construction of such facilities in the vicinity of Durango, Colorado, the cost not in excess of \$100,000, and to have a capacity for the treatment of approximately 100 tons of vanadium ores per day in the production of vanadium ore concentrates, said facilities hereinafter called the Durango plant;

"And whereas in accordance with a recommendation of the War Production Board it is contemplated that additional facilities estimated to cost approximately \$400,000 will be constructed as hereinafter mentioned in the vicinity of Grand Junction, Colorado, to have the capacity for the treatment of approximately 100 tons of vanadium ores per day in the production of vanadium ore concentrate, said facilities being hereinafter called the Grand Junction plant—"

- Q. That Grand Junction plant was not constructed for Metal Reserves, was it?
  - A. It was never constructed at all.

Q. Not constructed at all. Then the first paragraph [355] relates to the construction of a grand Junction plant. The second paragraph:

"Operation of plants and purchases of ores. Vanadium shall operate the plants for Metals' account. Metals will have at its option representatives at the plant who will act independently in sampling of shipments and have sole custody of all control samples.

"Vanadium shall exert its best efforts to purchase for Metals' account vanadium ore suitable for treatment in the plants at reasonable prices not to exceed 50 cents per pound of vanadium pentoxide contained, delivered at suitable loading points or ore-receiving stations, unless Metals shall hereafter authorize the payment of prices for such ores in excess of said 50 cents per pound.

"Vanadium will also upon request of Metals, act as agent for Metals in selling or otherwise disposing of and shipping the production of the plants. Detailed instructions covering the sales will be forwarded to Vanadium at a later date. Employees of Vanadium will not be employees of Metals for any purposes hereunder."

This is signed by G. Temple Bridgman and the secretary's name for Metal Reserves Company, I cannot read. [356]

For United States Vanadium Corporation it is signed by Mr. Gormely and it says, "Vice-President" at that time.

Q. Is that correct? It must be.

- A. I just don't offhand know. Mr. Gormely might have been, at least he might have been created vice-president for that purpose.
- Q. This was May, 1942. You were made vice-president in 1944?

  A. He could have been.
- Q. (By the Court): How long did these contracts remain in effect?
- A. Your Honor, my best recollection, about a year and a half, possibly two years from the time they started. In other words, from 1942 to mid-1943 or 1944.
- Q. During that time who controlled the disposition, the sale of vanadium in the United States?
- A. The Vanadium Corporation of America, I believe, was controlling the distribution and sale of the major part of the vanadium in the United States. The Electro Metallurgical Company was controlling the disposition of a minor part. There was no one in control. It was relative.
- Q. In what manner were the sales, the disposition of this vanadium made during that period? Who determined the purchasers?
- A. The War Production Board, I believe determined the purchasers of the vanadium resulting from the Metal Reserves, [357] and, as a matter of fact, for a period of time they controlled all purchasers. I believe that was the time that vanadium was under allocation. In other words, whoever used vanadium or whoever used other metals similar to vanadium had to go to the government agencies, which were, I think, the War Production Board, if

I am not mistaken, and obtain an allocation upon showing of the fact that it was going into the war effort and that they had a consumer who had a war contract and who would certify that he needed it.

So, for this time, I think that vanadium was all under allocation.

Q. Then what authority would any of the defendants in this case have to dispose of vanadium during that period without the approval of the War Production Board?

A. Well, to my best recollection, your Honor, I think it would all depend upon the War Production Board's disposition.

Mr. Archer: As Defendant's exhibit next in order, I will offer a letter agreement dated November 2nd, 1942, between Metal Reserves Company and United States Vanadium Corporation modifying the last exhibit.

Mr. Alioto: May I have that date again, Mr. Archer?

Mr. Archer: November 2nd, 1942.

Mr. Alioto: No objection.

(The document referred to was thereupon received in evidence and marked Defendant U's Exhibit E.) [358]

Mr. Archer: This is signed by G. Temple Bridgman and Van Fleet:

"Gentlemen:

"Reference is made to the Vanadium Agency

Agreement dated as of May 9, 1942, between your Corporation and this Company, the third sentence of Paragraph 2 which provides in part for the purchase of your Corporation for the account of this Company of vanadium ores 'suitable for treatment in the Plants,' i.e., the vanadium ore treatment plants at Durango and Grand Junction, Colorado. In view of (1) the fact that construction of the Grand Junction plant is, as you know, being deferred, (2) the arrangements which have been made for the operation of the vanadium ore treatment plant at Monticello, Utah by Vanadium Corporation of America, as Agent for this Company, and (3) the contemplated delivery of ore purchased by your Corporation, as our Agent, for treatment at the Gateway, Colorado plant of Gateway Alloys, Inc., now being operated by Messrs. Nisley & Wilson, we believe it advisable to modify the third sentence of Paragraph 2 of the above agreement to read as follows:

"'Vanadium shall exert its best efforts to [359] purchase for Metals' account vanadium ores suitable for treatment in such vanadium ore treatment plants as Metals shall from time to time designate, including the Plants, at reasonable prices not to exceed fifty cents (50c) per pound of vanadium pentoxide contained, delivered at suitable loading points or ore receiving stations, unless Metals shall hereafter authorize the payment for prices for such ores in excess of said fifty cents (50c) per pound. Vanadium shall treat ore so purchased in

the Plants, or shall sell such ore to others for treatment in the other vanadium ore treatment plants designated hereunder by Metals, or shall deliver such ore for treatment in plants so designated on such terms as may be authorized by Metals.'

"Accordingly, we hereby amend said Agreement by deleting therefrom the third sentence of Paragraph 2 and substituting in lieu thereof the language quoted in the immediately preceding sentence of this letter. If this amendment is acceptable to you, please sign and return to us the enclosed copy of this letter, to constitute an amendment as of the date hereof to said Agreement dated as of May 9, 1942. [360]

"Pursuant to said Agreement dated as of May 9, 1942, as so amended, we hereby designate the abovementioned plant at Monticello, Utah, as one of the plants to be supplied with vanadium ore purchased by you as our Agent under said Agreement, and accordingly we request you, as promptly as possible, to make the necessary arrangements to supply Vanadium Corporation of America with ore so purchased. A substantial part of the ore to be supplied by you for the operation of the Monticello plant is to be purchased by you from that Corporation, and includes both production from its mines as well as ore presently stockpiled at the Monticello plant. You are to purchase ore currently produced by Vanadium Corporation of America in accordance with said Agreement dated as of May 9, 1942, as araended; instructions governing the purchase of

(Testimony of Blair Burwell.)
ore stockpiled at the Monticello Plant will be given
to you at a later date."

Q. Mr. Burwell, do you recall the name of the individual who ran the ore stockpiling plant at Monticello?

A. Just at the moment—I think Mr. Holland can give us a bit of help. He is working for you in Durango right now.

Mr. Holland: Pardon me?

Mr. Archer: Paig Edwards? [361]

A. Paig Edwards.

Q. He was hired by Mr. Whitaker, was he not?

A. Well, technically, I don't think that's quite correct. I think Mr. Van Fleet knew Paig Edwards and Mr. Whitaker was acting as an umpire in the matter of the question between the two companies. Mr. Edwards then was officially the designate of Mr. Whitaker, but he was paid by Metals Reserve on that account. I don't know the mechanics of who hired him.

Q. And Mr. Whitaker reported directly to Mr. Bridgman, didn't he?

A. Well, he reported directly to Metals Reserve. I don't know who in Metals Reserve. Mr. Bridgman was only there a short time, and he was followed shortly after by another man, Mr. Henry DeWitt Smith.

Q. I show you a letter dated October 21, 1942, from Mr. Hill to Mr. Whitaker, copy to you, and ask you whether you can identify this letter and the individuals referred to?

A. (Witness examining): Yes, I have a copy of this letter right here.

Mr. Alioto: We make no question of identification, Mr. Archer.

(Inaudible remark of witness.)

Mr. Archer: I think his secretary signed it, but who was John W. Hill or who is he or what—

A. He was the enginee: in charge of the Metals Reserve [362] agency, under my direction.

Q. Where was his office?

A. Grand Junction, Colorado.

Q. And at this time you were in New York, your address at 30 East 42nd Street?

A. That's right.

Mr. Archer: I offer that as Defendant's exhibit next in order.

Mr. Alioto: No objection.

The Clerk: Defendant U's Exhibit F admitted and filed in evidence.

(Whereupon, copy of letter dated October 2, 1942, J. W. Hill to Orville R. Whitaker, was received in evidence and marked Defendant U's Exhibit F.)

Mr. Archer: It is addressed to Mr. Orville R. Whitaker, 932 Equitable Building, Denver, Colorado.

"Dear Mr. Whitaker:

"I just had a copy of a wire from Mr. H. DeWitt Smith, Metals Reserve Company, Washington, D.C."

He was the president, was he not—or Temple Bridgman?

A. No, I think he followed Mr. Bridgman. He's vice-president—he was an officer of Metals Reserve, anyway.

Mr. Archer: (Reading)

"I just had a copy of a wire from [363] Mr. H. DeWitt Smith, Metals Reserve Company, Washington, D. C., that was addressed to Mr. Blair Burwell, concerning the Nisley-Wilson Vanadium Mill at Gateway, Colorado. The wire requested our cooperation with Nisley and with you. Please advise me what arrangements have been made by the Metals Reserve Company with you concerning this operation.

"Mr. Harry Gardner and Mr. Frank Nisley, Jr., were in this office yesterday, in the presence of Mr. Burwell and myself, and we discussed the possibility of Metals Reserve Company furnishing Nisley and Wilson with ore, and Nisley and Wilson should mill the ore and deliver the vanadium oxide concentrate to the Metals Reserve at a contract price; therefore, the price of the ore is not a consideration. However, the grade would be established at a minimum of 2.00% V<sub>2</sub>O<sub>5</sub> and the ore was to come from the Gateway area in order to get the proper character of ore.

"Mr. Gardner stated that he estimated, and it would be necessary to confirm his estimate with his partners, that the vanadium oxide could be produced at \$.90 per pound, in other words, they would

(Testimony of Blair Burwell.)
mill the ore for a cost of \$.90 per pound. In my
[364] opinion this seems a little high.

"However, Mr. Gardner stated that before he could consider this further, he would have to check with the War Production Board as they have wired him that arrangements were being made for their operation."

Do you recall this conference among yourself, John Hill, Frank Nisley and Harry Gardner?

- A. Mr. Archer, what is the date of that letter again?
  - Q. October 2, 1942.
  - A. And the question, do I recall—?
  - Q. Just, recall the conversation as stated here.
  - A. In New York?
  - Q. Well— A. Washington?
  - Q. It sounds as though it's in Grand Junction.
  - A. Yes, I do recall that conversation.
  - Q. And who was Harry Gardner?
- A. Well, he was one of the owners or one of the partners of Nisley Gateway Alloys Company, at that time, I believe.
- Q. I show you a copy of a letter dated October 12, 1942, from United States Vanadium Corporation, Agent for Metals Reserve Company, Blair Burwell, to Messrs. Nisley and Wilson, and ask you whether you can identify that?
- A. (Witness examining): Yes, I can identify it, as my letter. [365]

Mr. Archer: I offer this as defendant's exhibit next in order, your Honor.

Mr. Alioto: No objection.

The Clerk: Defendant's U's Exhibit G admitted and filed into evidence.

(Whereupon, letter of October 12, 1942, U.S. Vanadium to Messrs. Nisley and Wilson, was received in evidence and marked Defendant Us Exhibit G.)

Mr. Archer: This is a letter dated October 12, 1942, from Mr. Burwell, copies to J. R. Van Fleet, H. DeWitt Smith, Orville Whitaker.

The letter is to Nisley and Wilson, Leasers, Gateway Alloys Company, Gateway, Colorado.

"Gentlemen:

"In regard to the proposed arrangements for supplying your operation with ores by the Metals Reserve Company, it will be necessary for you to furnish the Metals Reserve Company with a statement of detailed estimated cost of converting Metals Reserve Company ore to fused oxide.

"These statements of detailed cost should show the direct labor, salaries—Mr. Nisley and Mr. Wilson, supplies and repairs, depreciation, mill rental, profit, and any other costs which you estimate enter into this operation. [366]

"In accordance with our meeting in Denver on October 9, with Mr. Orville Whitaker, we will recommend for the consideration of Metals Reserve Company the arrangement discussed in Denver.

"The Metals Reserve Company in Washington has requested the detail of this estimated cost in

order that they may consider the matter and prepare a contract which would meet the requirements of the Metals Reserve Company.

"Mr. Hill is proceeding immediately with arrangements to establish an ore purchasing station at Gateway and to create a stockpile of ore at that point in anticipation of the completion of this arrangement.

"At the present time, the entire ore purchases in the Gateway-Uravan area do not equal the amount that you state you require for your mill, and it will be necessary to work out some arrangement to place the Calamity-Maverick mining areas into production.

"The United States Vanadium Corporation will be glad to cooperate with you in obtaining the necessary supply of ore as soon as we are authorized by the Metals Reserve Company in Washington."

Mr. Burwell, it states in here that "it will be necessary [367] to work out some arrangement to place the Calamity-Maverick mining areas into production." Do you know what that referred to?

- A. Yes.
- Q. What? A. What it says.
- Q. Do you know what were the problems?
- A. Well, you see, previously to this, Mr. Archer, as I believe I previously testified, that the available, accessible ore on the Calamity-Maverick mesa had been gathered up and mined and taken to Uravan—I believe that's correct—and, therefore, the properties were depleted to regular accessible ore.

And again following my previous testimony, I believe I stated it was necessary to dig under greater depths and open up new tunnels and start again, because you had harvested what was readily available and you had to start a new preparation or a new harvest. That is what that meant.

Q. Well, I now show you a letter dated October 13, 1942, from J. W. Hill to H. DeWitt Smith, copies to Mr. Van Fleet, yourself, W. G. Haldane and Mr. Orville Whitaker, and ask you if you can identify that letter?

A. (Witness examining): This is his signature. I don't know the letter, of course.

(Whereupon, letter dated October 13, 1942, Hill to Smith, was received in evidence and marked Defendant U's Exhibit H.) [368]

Mr. Archer: In this letter, Mr. Hill states to Mr. Smith:

"We are transmitting herein an estimate of cost of operation of the Nisley and Wilson Vanadium Mill at Gateway, Colorado, which has been prepared by Messrs. Nisley and Wilson in connection with the proposed treatment of Metals Reserve Company ore at the Gateway Plant.

"At the present time, this plant is not being operated at its estimated full capacity of 20 tons per day and Mr. Nisley and Mr. Wilson state that the figures submitted are estimates only and may vary somewhat with actual operation.

"While the costs appear to be much higher than

we experience in a larger plant, a more economical arrangement, it would be our recommendation that Metals Reserve Company make an arrangement with Messrs. Nisley and Wilson for the treatment of Metals Reserve ore at their plant and deliver fused vanadium oxide of suitable specifications to Grand Junction, Colorado, at a price of \$.85 per pound for 1.50% V<sub>2</sub>O<sub>5</sub> contained vanadium ore; \$.80 per pound for 2.00% V<sub>2</sub>O<sub>5</sub> contained vanadium ore; \$.75 per pound for 2.50% V<sub>2</sub>O<sub>5</sub> contained vanadium ore."

Then I will skip a paragraph. It says: [369]

"It is recommended that tailings from this operation remain the property of Metals Reserve Company and be stored and preserved by Nisley and Wilson in accordance with instructions from Metals Reserve Company."

Now, of what did those tailings consist, Mr. Burwell?

- A. They consisted of approximately 25% of the total vanadium, the lead ore, and all the vanadium that was in that ore.
- Q. Do you know what happened to the tailings from the Nisley and Wilson operation that were preserved for the Metals Reserve Company?
- A. Well, I believe part of them were washed away by the river and part of them were purchased and moved up to Uravan later on as part of the Manhattan District project.
  - Q. Then the uranium process?
  - A. And the vanadium process.

Mr. Archer: Continuing reading:

"At the present time, ores sufficient for this operation are not available in the Gateway District and arrangements will have to be made to stimulate the production of the Calamity District mines of Brown and Bowman, under contract from the Molybdenum Corporation of America, as well as other surrounding areas now under development.

"In proceeding with the arrangements for the Calamity District mines, this office will endeavor to procure an adequate engineering report of the district that can be used for a basis of securing development and working capital loans from the Metals Reserve Company if the same are necessary to expedite production.

"We believe the Calamity District can be developed into a substantial vanadium producer that will supply ore in excess of the Nisley-Wilson Plant capacity.

"At the present time, ore purchases by the United States Vanadium Corporation, at Uravan, from all the areas tributary to the Uravan Plant, do not reach the total tonnage required by Nisley and Wilson.

"We are proceeding with the installation of an ore purchase station at Gateway and the organization of a mining program on the Calamity District claims, subject to the agreement of the interested parties, and we will exert every effort to see that the Nisley and Wilson Plant is supplied with all

(Testimony of Blair Burwell.) the ore possible if the Metals Reserve Company enters into the agreement as suggested."

Did Mr. Hill and Mr. Haldane, under you, make every [371] effort to put the Nisley and Wilson plant into operation for the Metals Reserve Company? A. That's right, we did.

- Q. Do you recall that one of the difficulties in getting the Nisley and Wilson Mill into operation was due to the fact that Gateway Alloys was in bankruptcy and certain of the claims were subject to the orders of the bankruptcy court and the claims of certain creditors?
- A. I believe there was something in that connection. The detail I don't remember.
- Q. Do you recall who mined those claims for Metals Reserve—I will withdraw the question.

Didn't Ennis Cole mine the Calamity mines for Metals Reserve and turned their proceeds, the ere, over to the Nisley and Wilson plant?

- A. I think that's right. I think we got ahold of Ennis Cole, who is a good miner, and had equipment, and arranged—Mr. Hill arranged with him to start mining and developing the area in question.
- Q. Well, prior to that time, Ennis Cole had been the trustee in bankruptcy of the Gateway Alloys' claims, had he not? A. Well, I don't know.
  - Q. You don't recall that?
  - A. I don't recall. I believe that-
- Q. I show you a letter from John Hill, United States [372] Vanadium Corporation, Agent for Metals Reserve, dated October 22, 1942, to Mr. De-

Witt Smith, copies to J. R. Van Fleet, yourself, and Mr. Haldane, and ask you whether you can identify that?

A. (Witness examining) I can identify it.

Mr. Archer: I offer this as defendant's exhibit next in order. It shows the prices paid for the ore in the Cateway District.

The Court: Mr. Burwell, how many corporations or individuals were engaged in different mining projects in this particular territory?

A. At this particular time?

The Court: Well, from '38 to '46.

A. Let me give some thought to that answer, your Honor. There were probably 40 or 50 small mining groups and small mining companies, small mining individuals, who employed one or up to twenty-five men during this period, and they all together produced 170,000 tons of ore in that period from the various plants.

The Court: Did any of those fail for lack of capital or lack of engineering knowledge or want of—because they didn't discover—

A. I thought there were a few casualties in the group. Some of them did. Just at the moment, I can't recall their names. I believe there were one or two over in Moab who [373] couldn't meet their payroll, but, as a rule, we had an elastic price arrangement of 50c a pound—as you note in these contracts, and it was designed for just that particular purpose.

In other words, if you note, this contract which

is 50c compared to, say, 31c that previously existed. In the conferences that led to setting up this metals reserve program, we contemplated the fact that many of these people had remote areas and required road-building and more assistance to start up or to meet an initial need than the larger mining groups who were established. And, therefore, we requested a formula—I think that was my request—of 50c a pound which in some cases, if a miner was facing trouble, maybe we would pay him 38c, it might have been in one place—it wasn't a fixed 50c. If he would show he would fail if he didn't get more money, why, then, we would raise the price to give him a fair profit and still bring the ore out for the metal needs. [374]

The Witness: It was an elastic arrangement.

Q. (By The Court): What number of those that had invested in these leases and operations actually had mills that processed the ore?

A. I recall three, your Honor.

Q. What I am getting at, were there a number who mined the ore and sold the ore and did not pretend to process it?

A. The greater number of the people that were mining ore were people who had mines but had no mills, and therefore this program of the Durango mill and the Monticello mill was to give them a processing outlet for their ores and fused oxide, and I believe there were probably 20 or 25 or more of those miners, miners in groups, who up to that time did not have a processing mill available, and

therefore had not been able to operate prior to that.

Q. Who would buy the ore in that territory?

Well, up to the Metal Reserve program, the Vanadium Corporation of America and the United States Vanadium Corporation were buying the ore at a price which was roughly based on the cost of mining. In other words, it was not a high price; it was simply a price that was somewhat equivalent to the cost of producing the ore from their own mine. In this—this particular program to meet war needs was a somewhat abrupt reversal of previous policies that had been contained up to that time, and when the War Department asked me and Mr. [375] Van Fleet into a conference to get more vanadium, we said these people who have not had a processing plant or been able to get ore or operate. that if we provide them with a processing outlet in various plants, then we can increase the output of vanadium for the war effort.

And so we were asked—the Vanadium Corporation was asked to provide a plant, and we were asked to provide a plant where plants and war processing centers would be located, operated at government expense, to give the owners of the mines their outlets in fused oxide.

Therefore the whole program of Metal Reserves was somewhat of an abrupt reversal of previous policies by giving those 25 or 30 small miners an outlet at government expense.

Q. Let me ask you this: What could these miners, whether they were corporations or individuals.

that operated these mines and had no mills to process, what could they have done with the ore had they not sold it to these mills?

- A. You mean prior to this?
- Q. Yes, sir.
- A. They couldn't do anything with their ore.
- Q. What I am getting at is, was it anything unusual or out of the ordinary to purchase ore from these various mines that did not have mills?
- A. No, no, no. As a matter of fact, that was very often in their mind. A miner might think he was not getting enough [376] from his ore to live on. He would complain about what he got, which is chronically the case, but it is the usual thing, your Honor.

Mr. Archer: Your Honor, I offer as defendants' exhibit next in order, Mr. Hill's request to Mr. Smith in a letter dated October 22, 1942, for approval of entering into a lease with the trustee of the Gateway Alloys, Inc., for the ore at the Gateway mill.

Mr. Alioto: No objection.

(The letter referred to was marked Defendant U Exhibit I in evidence.)

[See Book of Exhibits.]

Mr. Archer: And just to complete the record, Mr. Burwell, I will show you Mr. Bridgman's letter dated November 19, 1942, to the United States Vanadium Corporation, copies to you and to Mr. Hill, approving Mr. Hill's request.

I offer that as defendants' exhibit next in order.

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(Testimony of Blair Burwell.)

Mr. Alioto: No objection.

(The letter referred to was thereupon marked Defendant U Exhibit J in evidence.)

[See Book of Exhibits.]

- Q. (By The Court): At the time this contract was made with the government in 1942 what was the status of your supply of ore or vanadium with these defendant companies?
- A. The United States Vanadium Corporation has a relative abundance of ore, your Honor. They owned most of their own [377] mines, while the Vanadium Corporation of America, who had newly entered the field and did not have mining properties, was rather deficient and more dependent upon buying ore.
- Q. Did you have quite a quantity of ore on hand, or vanadium on hand, at the time you made this agreement with the government?
- A. No, at the time we made the agreement with the government the war needs had taken over. All the vanadium that we could possibly produce was being shipped to the war effort. Everything was empty of vanadium. War had entirely changed all our market position.
- Q. (By Mr. Archer): Mr. Burwell, I show you now a letter from G. Temple Bridgman of the Metal Reserves Company to the United States Vanadium Corporation dated November 25, 1942. Attention, Mr. J. R. Van Fleet, vice-president, copies to Messrs. Nisely and Wilson, Blair Burwell,

- O. R. Whittaker, and J. W. Hill, and ask you whether you can identify that letter.
  - A. Yes, I believe I can.
- Q. This was your authorization to enter into the toll agreement with Nisely and Wilson, is that correct?
- A. I think that is correct, without reading the details.

Mr. Archer: I offer this as defendants' exhibit next in order.

Mr. Alioto: No objection. [378]

(The letter referred to was thereupon marked Defendant U Exhibit K in evidence.)

[See Book of Exhibits.]

Mr. Archer: Your Honor, this has a designation of "Restricted" on it by the government, but it has been declassified. It just happened that this copy was not crossed out. I will read just one paragraph with regard to this, or a few sentences in regard to this authorization (reading):

"If this agreement as enclosed is acceptable to you and Messrs. Nisely and Wilson, we authorize you as agent for this company to execute it, provided your counsel is satisfied that the lease under which Messrs. Nisely and Wilson are operating the Gateway plant is valid and binding upon the parties thereto. We have obtained a copy of this lease together with other related documents from counsel for Messrs. Nisely and Wilson, and these documents, together with a copy of the accompanying letter of their counsel, are enclosed herewith."

The enclosed agreement provides in substance that:

"For a period of 90 days your corporation, as agent, will supply vanadium ore for the operation of the Gateway plant; that such ore will be treated at such plant in consideration of the treatment charges specified in the agreement; and that all fused vanadium oxide, together with all tailings, produced [379] from such ore will be returned to you, as agent, at the Gateway plant.

"The agreement has been prepared upon the basis of a term of 90 days from the date of its execution, it being contemplated that the operation of the plant during this period will furnish a basis for subsequent agreement.

"Accordingly, during the term of the enclosed agreement, you should request and obtain from Messrs. Nisely and Wilson such complete information as to costs of operation, et cetera, as may be necessary for this purpose. You will act as shipping agent for this company, arranging for the shipment of vanadium oxide and tailings returned to you by Messrs. Nisley and Wilson to consignees designated by us, and following our written instructions as to means of transportation, routing and forwarding bills of lading, invoices and other related documents."

- Q. Mr. Burwell, do you know to whom the production from the Nisley and Wilson mill was consigned by the Metal Reserves Company?
  - A. No, I don't recall at this time.

Q. Do you recall that before you could get the agreement executed you had some difficulty or some delay in getting the [380] approval of the Molybdenum Corporation of America, who owned part of the leases in this area?

A. That might have been the ease, but I don't recall.

Q. I will show you a telegram—I do not think it shows the date on it—oh, yes, it does—January 7, 1943, from Blair Burwell, United States Vanadium Corporation, Agent for Metal Reserves Company, to Harry K. Masters, and ask you whether you can identify that.

A. Yes, I think so. It was a detail that had to do with the contract.

Mr. Archer: I offer this as defendants' exhibit next in order.

Mr. Alioto: Have you identified the handwriting on this, Mr. Archer!

Mr. Archer: I don't know.

Mr. Alioto: Can Mr. Burwell?

Q. (By Mr. Archer): Can you identify the handwriting?

A. I am not sure. I think that is Mr. Masters' writing, but I wouldn't say.

Mr. Alioto: We have no objection in any event to the introduction of the exhibit.

Mr. Archer: I think it is Mr. Masters'.

The Witness: I don't think it is important. Just a note about what he did. I think it is Mr. Masters' telegram, [381] and I think he simply noted on

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(Testimony of Blair Burwell.) there that that came from the Mineral Reserves file, Mr. Archer.

Q. (By Mr. Archer): It came from the Molybdenum Corporation files, so it must be his handwriting.

(The telegram referred to was marked Defendant U Exhibit L in evidence.)

[See Book of Exhibits.]

Mr. Archer: In other words, it is a copy of the one that was received, not the one that was sent. It states (reading):

"January 7, 1943

"Harry K. Masters

"C O Molybdenum Corporation of America"

"Operation of Gateway Alloys Plant

Corporation Agreement of Reece Referring to Our Letter December Twelfth and Your Reply December Twenty-One Stop. Would Very Much Appreciate Your Final Approval, Which I Understand Depends Upon Your Counsel James S. Crawford Stop. If Approved Will You Please Wire Mr. J. W. Hill, Grand Junction, So That The Gateway Alloys Trustees Can Proceed With Delivery of Ore and Start Plant Operations. Regards.

"Blair Burwell

"United States Vanadium Corporation, [382]

"Agents For Metal Reserves Company."

Q. (By Mr. Archer): Do you recall, Mr. Burwell, that you also participated in attempting to ar-

(Testimony of Blair Burwell.)
range some financing for the Nisley and Wilson
mill so that its capacity could be enlarged!

- \*A. I possibly could have done so: I remember that the local bank needed some assurance as to the matter, and I think that I spoke to the bank and told them that I would back up or guarantee certain financial transactions in accordance with our Metal Reserves agreement.
- Q. I will show you a copy of a telegram dated January 19, 1943, from John Hill to Mr. Blair Burwell and ask you whether that refreshes your recollection.
- A. Why, yes. I recall now that they had gone to the RFC for operating money, and that the procedure was quite—would take a long time, and we assisted them in their request for the RFC, but decided they could not move fast enough, so the result, I think, was the reason for this telegram.

Mr. Archer: I will offer the telegram as defendants' exhibit next in order.

Mr. Alioto: No objection.

(The telegram referred to was thereupon marked Defendant U Exhibit M in evidence.)

Mr. Archer: Telegram dated January 19, 1943 (reading): [383]

"Mr. Blair Burwell

"Room 1426 30 East 42nd Street

"New York, N. Y."-

from John Hill (continuing reading):

"Nisley and Wilson Cancelling Request For RFC Loan Stop. I Recommend Metal Reserves Advance Them \$4800 For Working Capital and Certain Fixed Capital Necessary Before Plant Is Placed Into Operation At Maximum Capacity Stop: Advance to Be Repaid In Ninety Days By Deducting Ten Cents a Pound V<sub>2</sub>O<sub>5</sub> Produced Stop. Ore Supply Seems Assured For Twenty Days Stop. Letter Follows."

- Q. (By Mr. Archer): Do you recall whether they finally made the advance from Metal Reserves, or whether they finally got the RFC loan?
- A. My best recollection, Mr. Archer, is that we let them have the money from the Metal Reserves. I believe I recommended the Metal Reserves give them that assistance.
- Q. In any event, they did get the money to go ahead with that operation?
- A. Yes. You see, they had a \$50,000 plant originally, and they were converting to meet some problems, and they had not quite finished that conversion and needed a certain amount of money to complete that. So I think the story was there was some urgency in how fast they got the money, and because [384] of that the Metal Reserves advanced them money, which they were authorized to do under the approval of the Metal Reserves in Washington.
  - Q. Do you recall what those problems were?
- A. Oh, I think they were minor problems of the plant, such as they had to replace a fan that was-

(Testimony of Blair Burwell.)
not the proper type of fan. We had other questions.
I don't remember the details.

Q. Technical problems?

A. Technical problems.

Mr. Archer: Does your Honor want to recess now?

The Court: Very well, we will recess for ten minutes.

(Short recess.) [385]

Mr. Archer: Shall I proceed, your Honor?

- Q. You will recall, Mr. Burwell, that I had asked you if you knew where the production from the Nisley and Wilson plant under the Metals Reserve operation went, and I believe you said that you did not recall. Is that correct?
  - A. That's correct.
- Q. I now show you a letter from G. Donald Emigh—I believe we referred to him before.
  - A. That's right.
- Q. And he was a mining engineer that worked for United States Vanadium Corporation?
  - A. Correct.
- Q. Letter from G. Donald Emigh, United States Vanadium Corporation as agent for Metals Reserve Company, to Continental Ore Company, 500 Fifth Avenue, New York City, Attention Mr. Wolf, dated May 4, 1943, copies to J. R. Van Fleet, Blair Burwell and J. W. Hill, and ask you whether you can identify that?

(Witness examining.)

A. Well, that's his signature. I can identify it.

Mr. Alioto: Excuse me, Mr. Archer. Is this being offered to show where Nisley and Wilson production went?

Mr. Archer: I was going to ask Mr. Burwell if this would refresh his recollection.

Mr. Alioto: You are not offering it then? [386]

Mr. Archer: I am going to offer it.

Mr. Alioto: Well, I am going to object to it, if your Honor please, because if it is intended to show that this production went to Continental Ore Company, it is contrary to the fact.

Mr. Archer: I agree, it is contrary to the fact.

Mr. Alioto: Oh, all right. We would like-

The Court: I have no idea what it would show. But is it competent evidence?

Mr. Alioto: I don't think it is, if your Honor please. It is—well, we have no objection to it. The facts will develop. Well, just—we will not object to it. We have no objection to it being received in evidence, if your Honor please.

The Clerk: Defendant U's Exhibit N admitted and filed in evidence.

(Letter, May 4, 1943, G. Donald Emigh to Continental Ore Company, received in evidence and marked Defendant U's Exhibit N.)

Mr. Archer: A letter dated May 4, 1943, from United States Vanadium Corporation, as agent for Metals Reserve Company, to Continental Ore Company, 500 Fifth Avenue, New York City, Attention Mr. M. Wolf.

"Enclosed is copy of our letter asking Ledoux and Company to analyze shipments of fused vanadium [387] oxide from the Nisley-Wilson plant, Gateway, Colorado, on their arrival at Langeloth, Pennsylvania.

"We are asking our Colorado office to mail you both in New York and at Langeloth copies of the bills of lading on the date shipments are made.

"Will you please advise Ledoux and Company on arrival of product at Langeloth so that they can arrange to weigh, sample and analyze shipments."

Q. Mr. Burwell, I now show you-

Mr. Alioto: Excuse me, would you have any objection to having the witness identify what Langeloth is, if he knows?

- Q. (By Mr. Archer): Langeloth, Pennsylvania, is where Climax Molybdenum Company has their plant, that's correct, is it not?
  - A. That's correct.

Mr. Alioto: Thank you.

- Q. (By Mr. Archer): Mr. Burwell, I show you a letter dated May 12, 1943, from G. Donald Emigh to Mr. J. W. Hill, Supervising Engineer, copy to J. R. Van Fleet and Blair Burwell, and ask you whether you can identify that letter, together with the enclosure.
- A. (Witness examining) I believe I could identify it. There's a lot of detail in there that I—
  - Q. In substance the—[388]
  - A. In substance.
  - Q. In substance it refers to the extension of the

Nisley and Wilson toll agreement through the year 1943?

A. And the metallurgical recoveries and other matters in regard to the operation.

Mr. Alioto: We have no objection, Mr. Archer.

Mr. Archer: Offer it as defendants' next in order.

The Clerk: Defendant U's Exhibit "O" admitted and filed in evidence.

(Letter October 12, 1943, G. Donald Emigh to J. W. Hill, w/enclosures, received in evidence and marked Defendant U's Exhibit "O".)

[See Book of Exhibits.]

Mr. Archer: There is just one statement I would like to read. First, in the attachment from Mr. Emigh, United States Vanadium Corporation, as agents for Metals Reserve Company, to Metals Reserve Company, Washington, D. C., Attention: Mr. H. DeWitt Smith, "Subject: Toll Agreement (Nisley-Wilson):

"Gentlemen:"

I will just read one paragraph:

"From our wire of June 30th to you and from conversations in the interim, we have recommended to you that the treatment charges to be paid under this supplemental agreement should initially be the same as [389] those provided for in the toll agreement dated January 6, 1943. We are in this letter hereby reaffirming that our examination of the records of the Nisley-Wilson operation, copies of which have been sent you, indicates to us that

present toll charges are necessary for the maintenance of this operation. It is our recommendation that these charges remain unchanged at this time."

The second attachment is a letter of the same date, October 12, 1943, from Mr. Emigh to the Metals Reserve Company, Attention: Mr. H. De-Witt Smith, Subject: Nisley-Wilson Vanacium Operation.

"Gentlemen:

"In the August Progress Report on the vanadium operations, three copies of which were sent recently to your Mr. Petterson, it was pointed out that recovery to date in the Nisley-Wilson vanadium mill at Gateway, Colorado, is between 66.30% and 67.80%."

Q. Now, what does that mean, Mr. Burwell?

A. It meant that is the amount of total vanadium in the ore that was recovered in fused oxide.

Q. This is a technical matter or a metallurgical matter, is it?

A. Yes.

Mr. Archer: (Reading.) [390]

"The toll agreement of January 26, under Clause 6, provides that the  $V_2O_5$  content of the fused vanadium oxide produced shall not be less than 70.00% of the  $V_2O_5$  content in the ore treated.

"With present recovery figures at hand, it is apparent that the operators of the Nisley-Wilson plant are not making the 70.00% recovery. In our judgment this plant is being handled in an efficient manner and the recoveries being made are

not out of line with those effected at other vanadium plants in this region.

"We recommend to Metals Reserve Company, therefore, that in the Toll Agreement dated January 26, 1943, in Clause 6, the minimum recovery figure of 70.0% be changed to 6.50%."

- Q. And that change was made, was it not, Mr. Burwell?
  - A. I presume so. I don't know.
- Q. Do you recall that the Metals Reserve program was terminated in part at the end of 1943 and the beginning of 1944?
  - A. I believe that's correct.
- Q. And this was pursuant to instructions from the Metals Reserve Company, was it not?
  - A. That's right.
- Q. I now show you a letter—a copy of a letter—it is unsigned—dated December 1, 1943, from Metals Reserve Company, Washington, D.C., to the United States Vanadium Corporation, to which are attached copy of a letter of the War Production Board dated November 22, 1943, H. G. Batchelor, to The Honorable Secretary of Commerce, Washington 25, D.C., copy of a letter from the War Department, Headquarters, Army Service Forces, Washington, 16 November 1943, Major General Lucius B. Clay, to W. L. Clayton, Assistant Secretary of Commerce, and a letter dated November 24, 1943, to Major General Lucius B. Clay, Director of Materiel, Army Service Forces, from W. L. Clayton, Assistant Secretary, and ask you whether

you can identify those and whether those were your instructions on the termination of the Metals Reserve program?

- A. (Witness examining.) I will do the best I can. That's a pretty big order.
- Q. I think all the copies are referred to in the top letter.
- A. This is a whole string of letters here, apparently, that refer to the authority that created the Metals Reserve program. (Examining.) And I believe that this is in accordance with their structure. I can't identify all these letters of Clay or the rest—It looks like it was in the usual course of business in connection—

Mr. Alioto: If I could see that, we will obviate any question of identification. You won't have any trouble about it, Mr. Archer. [392]

(Counsel examining.)

Mr. Alioto: Do you want to put them all in?

Mr. Archer: As one exhibit.

Mr. Alioto: Well, they are from third parties who aren't here. But we will waive the objection on it, if your Honor please.

Mr. Archer: I believe they are official acts, your Honor.

Mr. Alioto: Well, they are not official acts in that sense.

Mr. Archer: I offer them as defendants' exhibit next in order.

The Clerk: Defendant U's Exhibit "P" admitted and filed in evidence.

(Group of letters referred to was received in evidence as Defendant U's Exhibit "P".)

Mr. Alioto: This is being offered solely to establish the date of termination, is that it, Mr. Archer?

Mr. Archer: The date and the reasons for the termination and the basis upon which the United States Vanadium Corporation, a defendant in this lawsuit, acted as agent for the Metals Reserve Company.

Mr. Alioto: All right, we have no objection on that basis.

Mr. Archer: Letter dated December 1, 1943, from [393] G. Temple Bridgman to United States Vanadium Corporation, agent for Metals Reserve Company, 30 East 42nd Street, New York, New York.

"Re: Contract AA-92 Grand Junction Program "Gentlemen:

"This acknowledges your letter of November 19, outlining a tentative program for curtailment of the vanadium program, in reply to our letter of October 20 on the same subject.

"For your information, as our agents under Contract AA-92, we are enclosing a copy of letter from Mr. H. G. Batcheller, Operations Vice Chairman of the War Production Board, to the Honorable Jesse H. Jones, Secretary of Commerce, advising that the War Production Board's interest and responsibility in the vanadium program as to the operation of government vanadium plants at Monti-

(Testimony of Blair Burwell.) cello, Utah, and Durango, Colorado, and as to vanadium procurement program, has been withdrawn.

"I falso enclose an exchange of correspondence between Major General Lucius D. Clay, Director of Materiel, Army Service Forces, and Mr. W. L. Clayton, Assistant Secretary of Commerce, with reference to the possible extension of this program.

"In view of the above, we request that you arrange, if possible, for the cancellation by mutual consent [394] of the Garfield lease and the termination of the Garfield operating agreement, both effective on or before February 29, 1944. In the event that cancellation by mutual consent cannot be arranged, will you kindly advise us promptly and we will take other steps into consideration for cancelling this agreement.

"We are advised that the Nisley and Wilson toll agreement expires on January 1, 1944. We request that you give Nisley and Wilson thirty days' notice that this toll agreement will not be extended beyond its expiration date unless you have reason to believe that this program should be continued in the interest of the procurement of other products than vanadium."

Q. Do you know what other products were referred to, Mr. Burwell? A. Uranium.

Mr. Archer: (Reading.)

"In connection with the present ore production program, in view of Mr. Batcheller's Letter of November 22nd, will you kindly take the necessary 410

(Testimony of Blair Burwell.)

steps to promptly curtail the purchase of ores which are of interest only for their vanadium content. The details procedure for curtailment of purchases of such ores is a matter for your own judgment, except that we would like such purchases discontinued not later than [395] February 29, 1944, except in such exceptional instances where substantial expenditures for development have been made by the operation. In connection with such latter instances, we would appreciate specific comments and recommendations from your agency before commitments are made to prolong any purchase program beyond February 29, 1944."

Attached to this are several letters, which I shall attempt to read in sequence.

November 16, 1943, War Department, Headquarters Army Service Forces, Washington.

Lucius D. Clay, Major General, General Staff Corps, Director of Materiel, to W. L. Clayton, Assistant Secretary of Commerce, Lafayette Building, Washington, D.C.

"Dear Mr. Clayton:

"Confirming our telephone conversation today, it is necessary to the war effort that the Metals Reserve Company continue operations on a full-time basis at the vanadium plants at Durango, Colorado, and Monticello, Utah.

"It is further requested that the Metals Reserve Company continue the operation of its Vandium Ore procurement under the agency of U. S. Vanadium Company."

November 24, 1943, from W. L. Clayton, Assistant Secretary, to Major General Lucius D. Clay: "Dear General Clay:

"I have your letter of November 16, 1943, and in accordance with your request Metals Reserve Company will continue the full-time operation of its vanadium plants at Durango, Colorado and Monticello, Utah and will continue its ore procurement program under the agency of the United States Vanadium Corporation pending the completion of arrangements discussed on November 6, 1943, between War Production Board, War Department and Metals Reserve Company.

"It is our understanding that all the foregoing activity after December 31, 1943 will be for the account of the War Department for the Corps of Engineers, which will complete necessary arrangements with Metals Reserve Company prior to that time.

"As there are numerous operating details to be worked out in order to continue those functions in the manner you wish, it is suggested that the representatives of the Corps of Engineers immediately get in touch with Mr. H. DeWitt Smith of Metals Reserve Company, inasmuch as all such arrangements should be concluded before the first of the year." [397]

Then the letter from H. G. Batcheller, Operations Vice Chairman, War Production Board, to The Honorable, The Secretary of Commerce, dated November 22, 1943 (reading):

"Early in the war period, as a result of a critical shortage of vanadium, numerous steps were taken by the War Production Board and its predecessor organizations looking toward expansion in the production and supply of this material to meet the needs of the war program.

"Included in this overall program was the erection of two new plants to treat vanadium ores and production of vanadium pentoxide (V205) therefrom. One of these plants at Monticello, Utah, is a Defense Plant Corporation project, operated by Metals Reserve Company; the other at Durango, Colorado, is the property of Metals Reserve Company, operated for them under an agency agreement. A further arrangement was later made with Nisley & Wilson (Gateway Alloys Company) at Gateway, Colorado, to process certain vanadium ores for the production of vanadium pentoxide.

"As an essential part of the vanadium program, there was also set up a vanadium agency through Metals Reserve Company for a program of developing ore reserves and the procurement of ores for government plants. Two problems have now come up as a [398] result of which it appears necessary to completely alter the responsibilities and functional operation of the entire vanadium program.

"In the first place, the supply-demand situation of vanadium has changed substantially in recent months. It now appears that the total requirement of vanadium can be supplied by those plants which are owned and operated by private industry with-

out recourse to either of the two government plants referred to above or to the program with respect to subsidized operation at the Nisley & Wilson, Gateway plant.

"In this connection, it is important that the operations at all three of these plants, although previously necessary in the interest of the war program, have been carried out at a loss to the government because of costs involved which were in excess of the price which could be realized for the final product: vanadium pentoxide.

"At the same time, it has developed that the Army is actively interested in this same vanadium program for reasons other than vanadium. This Army program has reached a point where the entire emphasis of the program is now on materials other than vanadium. Under the circumstances, therefore, the program can no longer be considered a vanadium program and it cannot continue to be operated as such, by or under the direction of the War Production Board.

"It is imperative, therefore, in view of the current vanadium situation, in view of the completely changed character and emphasis in this program, and in view of certain other features of the program making a joint or collateral program impossible, that the entire responsibility and operating direction of the vanadium program, including plants and ore procurement be transferred from the War Production Board to the Army.

"This matter has been under discussion for some

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(Testimony of Blair Burwell.)

time with the Armed Services and this conclusion was mutually agreed upon by all interested parties, including the Army Service Forces, Metals Reserve Company and War Production Board in accordance with the attached memorandum of a meeting held on November 6, 1943.

"Accordingly, we wish to advise you that the War Production Board's interest and responsibility in the vanadium program as outlined is withdrawn to be shifted, in accordance with whatever arrangements may be made, to the Army, the Army Service Forces, [400] or whatever appropriate division may be designated."

Mr. Alioto: If your Honor please, I believe the first sentence of this letter indicated that it was a reaction of the Metals Reserve Company to a letter from the United States Vanadium Corporation dated November 19, 1943.

Do goe have that letter?

Mr. Archer: If we have it we will produce it.

Mr. Alioto: Do you have it. Do you know whether you have it?

Mr. Archer: I do not know whether I have it, but I will look for it.

Mr. Alioto: I would think that is a rather important letter, because everything is a reaction to what they say as to the supply situation of that time, and I would respectfully request an order of the Court that Vanadium Corporation produce that letter of November 19th.

Mr. Archer: We will be glad to produce it if we have it.

Mr. Alioto: Tomorrow morning?

Mr. Archer: If we have it. I will look for it tomorrow.

The Court: If you have it, produce it.

Mr. Archer: Sure. I have no\_objection to that. I would object to counsel's statement that this letter is all a reaction to the Metals Reserve letter, because I think the [401] attached letter explains the purpose of the letter.

The Court: The letter speaks for itself.

Q. (By Mr. Archer): Mr. Burwell, I now show you what has previously been marked as Exhibit 1 in the deposition of Robert D. Nininger and ask you whether you can identify this exhibit.

Mr. Alioto: Did the witness write this letter or receive a copy of it, Mr. Archer?

The Witness: I have received a copy of this letter, but I am a little bit concerned, because this is a top secret Manhattan Project, and "secret" had been marked off. It has been declassified. But it does not show the initial of whoever declassified it.

In this particular document, this has something to do with the survey of S-37, which I think I know what it is—I know what it is—and this is addressed to Union Mines Development Company.

Mr. Archer, can you tell me whether or not you have examined this more in detail, that this document pertained to all the Union Mines Development, or only a portion of it?

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(Testimony of Blair Burwell.)

Mr. Archer: All of it cannot be declassified. I subpoenaed all of it from the Atomic Energy Commission—I subpoenaed all that could be declassified. And that is what they gave me. You will notice there are deletions in there.

The Witness: I would raise a bit of a question on [402] this document.

Q. (By Mr. Archer): As to whether it can be declassified?

The Witness: Now, for instance, could I ask you, the S-37 resources, does that include resources both in Canada and here, for instance?

Mr. Archer: Just what it says there.

The Witness: What does it say?

Mr. Alioto: Has the witness seen this document before?

The Witness: You say you have cleared this with the government. I was one of the people who used to make these classification stamps on here, Mr. Archer.

Q. (By Mr. Archer): You are familiar with this contract, are you?

A. Oh, my, yes; I lived with it.

Q. You were an officer of the Union Mines Company, weren't you?

A. That is right.

The Court: What is your question?

Mr. Archer: I just wanted him to identify the contract.

A. Well, I can identify that there was this contract, yes.

The Court: That is all he has asked. [403]